



COUNTY COUNCIL OF LANARK.

ANNUAL REPORTS

OF THE

COUNTY AND DISTRICT MEDICAL OFFICER

AND THE

DISTRICT SANITARY INSPECTORS

FOR THE YEAR 1927.



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FOR THE YEAR 1927.

GLASGOW :

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STAFF.

COUNTY HEALTH DEPARTMENT.

County and District Medical Officer.

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Assistant Health Officers and Tuberculosis Officers.

Middle Ward District—

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Upper Ward District—

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Bacteriologist.

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FRANK M'ARTHUR.

District Sanitary Inspectors.

Middle Ward District—

JOHN MILLAR.

Upper Ward District—

WILLIAM PATERSON.

Lower Ward District—

JOHN B. PHILIP.

COUNTY OF LANARK

(EXCLUSIVE OF BURGHS).

Report of the County and District Medical Officer.

Year 1927.

Staff.

In addition to the Medical Staff given on the opposite page, two Medical Officers are also employed in connection with the Maternity and Child Welfare Scheme in the Middle Ward District.

Statistics.

The *Area* of each of the three Sanitary Districts of the County is as follows:—Middle Ward, 184,611 acres; Upper Ward, 326,803 acres; and Lower Ward, 21,166 acres.

The *Population*, as ascertained at the Decennial Censuses, 1891, 1901, 1911, and 1921, as well as the estimated population for the years 1922-1927, are given in the following tabular statement. The population, estimated to the middle of the year, is based upon the number of occupied houses, according to the Valuation Roll and the institution population in the annual Police Census:—

(Census Population.)

Year.		Middle Ward.	Upper Ward.	Lower Ward.	County.
1891,	-	142,548	37,005	30,261	209,814
1901,	-	179,363	40,420	*41,531	261,314
1911,	-	202,663	42,978	56,974	302,615
1921,	-	218,817	46,701	29,933	295,451

(Estimated Population.)

1922,	-	224,790	46,870	30,220	301,880
1923,	-	232,700	47,700	31,500	311,900
1924,	-	237,000	48,400	32,600	318,000
1925,	-	237,000	48,200	33,000	318,200
1926,	-	237,000	48,200	29,750	314,950
1927,	-	236,000	48,000	30,000	314,000

* Does not include the population (5,642) in the area annexed to the Burgh of Govan as from 15th August, 1901.

The reduction in the area and population through extension of Burgh Boundaries since the year 1891 was as follows:—

	Acreage.	Estimated Population.
1896—City of Glasgow, - - -	450	632
Burgh of Wishaw, - - -	465	1,100
1899—City of Glasgow, - - -	370	399
1901—Burgh of Govan, - - -	209	5,642
Do. Hamilton, - - -	67	—
1906— Do. Rutherglen, - - -	469	3,000
1908— Do. Motherwell, - - -	438	3,600
Do. Lanark, - - -	214	260
1912—City of Glasgow, - - -	1,706	28,490
1913—Burgh of Renfrew, - - -	216	18
1914— Do. Coatbridge, - - -	32	4
1920— Do. Motherwell and Wishaw, - - -	296	500
1924— Do. Coatbridge, - - -	250	10
1925— Do. Hamilton, - - -	931	84
1926— City of Glasgow, - - -	3,477	4,350
1927— Burgh of Airdrie. - - -	326	405

The Natural Increase of the Population—i.e., the excess of births over deaths—also shows a considerable decline since the decennial period 1891-1900, the figures for the three decennial periods 1891-1920, for the quinquennial period 1921-1925, and for the years 1926-7 being as follows:—

		Annual average.					
		1891-1900	1901-1910	1911-1920	1921-1925	1926	1927
Natural increase,	...	4,563	5,844	4,843	4,526	4,049	3,648
Natural increase per 1,000							
of the Population,	...	19·3	20·5	16·7	14·6	12·8	11·6

Rates.—For the purposes of comparison, Table A shows birth and mortality rates of each Sanitary District for the last three decennial periods, for the quinquennial period 1921-25, and for the years 1926-1927. It will be observed that the rates are highest in the Middle Ward District, where the employment of the population is chiefly in mining and manufacturing industries.

In each district there has been a marked decline in the birth-rate and death-rate since the decennial period of 1901-1910.

TABLE A.—SHOWING BIRTHS AND DEATHS IN EACH COUNTY
SANITARY DISTRICT; BIRTH-RATES AND DEATH-RATES PER
1,000 OF THE POPULATION; AND INFANTILE DEATHS AND
INFANT MORTALITY RATES PER 1,000 BIRTHS.

		Average. 1891- 1900.	Average. 1901- 1910.	Average. 1911- 1920.	Average. 1921- 1925.	1926.	1927.
MIDDLE WARD.—							
Births, ...	...	6,232	7,412	6,820	6,406	5,928	5,640
Birth-rates, ...	...	39.1	38.9	32.5	27.8	25.0	23.9
Infant Deaths (under one year), ...	...	809	921	754	592	489	493
Infant Deaths per 1,000 Births, ...	...	129.9	124.2	110.4	92.4	82.4	87.4
Deaths, ...	...	2,908	3,118	3,000	2,789	2,618	2,649
Death-rates, ...	...	18.1	16.3	14.3	12.1	11.0	11.2
UPPER WARD.—							
Births, ...	...	1,222	1,209	1,143	1,125	999	920
Birth-rates, ...	...	31.6	28.9	25.9	23.6	20.7	19.2
Infant Deaths (under one year), ...	...	116	104	91	81	52	64
Infant Deaths per 1,000 Births, ...	...	95.5	86.5	80.2	71.8	52	69.5
Deaths, ...	...	606	552	561	541	498	522
Death-rates, ...	...	15.6	13.2	12.7	11.3	10.3	10.8
LOWER WARD.—							
Births, ...	...	1,200	1,576	869*	651	591*	567
Birth-rates, ...	...	32.9	33.4	24.1*	20.6	19.0*	18.9
Infant Deaths (under one year), ...	...	150	174	88*	51	39*	46
Infant Deaths per 1,000 Births, ...	...	125.2	110.8	98.2*	78.6	65.9*	81.1
Deaths, ...	...	577	683	428*	326	353*	308
Death-rates, ...	...	15.9	14.4	12.2*	10.3	11.3*	10.3

* By the Glasgow Boundaries Act, 1912, an area of 1,706 acres, with a population of 28,490 was annexed by the City of Glasgow, which affected the statistics from 1st January, 1913, and again by the Glasgow Boundaries Act, 1926, a further annexation of 3,477 acres, with a population of 4,350, took place, which affected the statistics for the year 1926.

Details with regard to the various causes of death and the births and deaths in each parish will be found in the district reports.

The following Table B gives the deaths in each of the three County sanitary areas, classified according to cause, and the death-rates per 1,000 of the population:—

TABLE B 1927.

Cause of Death.	MIDDLE WARD.		UPPER WARD.		LOWER WARD.	
	Deaths	Death-rate per 1,000 popula- tion.	Deaths.	Death-rate per 1,000 popula- tion.	Deaths.	Death-rate per 1,000 popula- tion.
Typhoid Fever, - - -	2	·01	—	—	—	—
Smallpox, - - -	—	—	—	—	—	—
Measles, - - -	19	·08	3	·06	—	—
Scarlet Fever, - - -	5	·02	—	—	3	·10
Whooping-Cough, - - -	33	·14	3	·06	8	·27
Diphtheria, - - -	10	·04	4	·08	2	·07
Influenza, - - -	95	·40	21	·44	8	·27
Cerebro-spinal Fever, - - -	10	·04	—	—	—	—
Erysipelas, - - -	4	·02	1	·02	1	·03
Encephalitis Lethargica, - - -	9	·04	1	·02	1	·03
Tetanus, - - -	3	·01	—	—	—	—
Dysentery, - - -	—	—	—	—	—	—
Pulmonary Tuberculosis, - - -	113	·48	28	·58	16	·53
Meningeal „ - - -	30	·13	2	·04	3	·10
Abdominal „ - - -	29	·12	4	·08	1	·03
Other Tuberculous Diseases, - - -	15	·06	4	·08	2	·07
Septicæmia and Pyæmia, - - -	11	·05	3	·06	—	—
Rheumatic Fever, - - -	11	·05	7	·15	—	—
Malignant Diseases, - - -	239	1·01	56	1·17	26	·87
Meningitis (simple), - - -	20	·08	8	·17	1	·03
Cerebral Hæmorrhage, - - -	186	·79	44	·92	21	·70
Other Nervous Diseases, - - -	41	·17	9	·19	9	·30
Organic Heart Disease, - - -	292	1·24	62	1·29	37	1·23
Other Circulatory Diseases, - - -	54	·23	7	·15	3	·10
Bronchitis, - - -	141	·60	33	·69	17	·57
Pneumonia (all forms), - - -	243	1·03	21	·44	20	·67
Other Respiratory Diseases, - - -	32	·13	18	·37	1	·03
Diabetes, - - -	31	·13	5	·10	3	·10
Pernicious Anæmia, - - -	23	·10	2	·04	—	—
Diseases of Ductless Glands, - - -	12	·05	—	—	1	·03
Appendicitis, Typhlitis, - - -	16	·07	8	·17	4	·13
Liver Diseases (not Malignant), - - -	16	·07	7	·15	1	·03
Other Digestive Diseases, - - -	79	·33	11	·23	11	·37
Nephritis, Bright's Disease, - - -	63	·27	14	·29	9	·30
Dis. of Genito-Urinary System, - - -	22	·09	2	·04	1	·03
Dis. of Female Genital Organs, - - -	12	·05	1	·02	1	·03
Puerperal Sepsis, - - -	20	·08	1	·02	—	—
Dis. and Acc. of Pregnancy, &c., - - -	13	·05	2	·04	—	—
Congenital Hydrocephalus, - - -	3	·01	—	—	—	—
Congenital Heart Diseases, - - -	17	·07	1	·02	1	·03
Congenital Malformation, - - -	19	·08	1	·02	3	·10
Infantile Convulsions, - - -	33	·14	5	·10	—	—
Diarrhœa (under 2 years), - - -	43	·18	4	·08	2	·07
Premature Birth, - - -	115	·49	14	·29	12	·40
Injury at Birth, - - -	5	·02	—	—	1	·03
Atrophy, D. and M., - - -	67	·28	14	·29	9	·30
Atelectasis, - - -	10	·04	—	—	—	—
Suffocation—Overlying, - - -	2	·01	—	—	—	—
Rickets, - - -	—	—	—	—	—	—
Other Diseases of early infancy, - - -	4	·02	1	·02	—	—
Syphilis, - - -	5	·02	1	·02	—	—
Violence, - - -	134	·57	23	·48	18	·60
Suicide, - - -	3	·01	3	·06	—	—
Other Defined Diseases, - - -	173	·73	63	1·31	45	1·50
Ill-Defined Diseases, - - -	62	·26	—	—	6	·20
Total, - - -	2,649	11·22	522	10·87	308	10·27

The following table gives a comparison of the County birth and mortality rates with those of the Burgh areas for the year 1927. This information has been extracted from the Annual Report of the Registrar-General. It should be noted that the figures for the three County Sanitary Districts are slightly different from the figures published by the Public Health Department, due to the fact that the Registrar-General's estimated population differs from that of the Public Health Department:—

YEAR 1927.				
	Population estimated by Registrar-General.	Birth-rate. Corrected for Transfers.	Death-rate. Corrected for Transfers.	Infantile Mortality Rate. Corrected for Transfers.
COUNTY OF LANARK—				
Middle Ward, -	228,256	24·7	11·6	88
Upper Ward, -	47,249	19·5	11·1	69
Lower Ward, -	30,977	18·3	9·9	81
BURGHs—				
Glasgow, - -	1,054,744	22·4	14·6	107
Motherwell and Wishaw, -	70,457	21·1	11·2	79
Coatbridge, -	44,361	26·1	14·2	118
Hamilton, -	40,498	21·9	11·6	87
Airdrie, - -	25,096	25·5	12·9	84
Rutherglen. -	24,242	18·3	13·0	108
Lanark, - -	6,289	20·5	14·2	47
Biggar, -	1,537	11·1	16·9	59

Prevalence of Infectious Diseases.

Table C gives the cases and deaths due to the various infectious diseases in each Sanitary District during the year:—

TABLE C.

	Middle Ward.		Upper Ward.		Lower Ward.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Smallpox, - - -	—	—	—	—	—	—
Diphtheria, - - -	463	10	83	4	86	2
Scarlet Fever, - - -	545	5	108	—	67	3
Typhoid „ - - -	8	2	—	—	—	—
Paratyphoid, - - -	—	—	1	—	—	—
Continued Fever, - - -	2	—	—	—	—	—
Cerebro-spinal Fever, - - -	13	10	—	—	1	—
Erysipelas, - - -	153	4	28	1	15	1
Puerperal Fever, - - -	82	20	4	1	3	—
Infantile Paralysis, - - -	9	—	1	—	1	—
Ophthalmia Neonatorum, - - -	174	—	3	—	9	—
Malaria, - - - -	—	—	—	—	—	—
Dysentery, - - - -	3	—	1	—	7	—
Tetanus, - - - -	4	3	—	—	—	—
Primary Pneumonia, - - -	1,156	243	41	21	99	20
Influenzal „ - - -	123		15		20	
Pulmonary Tuberculosis, - - -	320	113	46	28	31	16
Non-Pulmonary „ - - -	392	74	25	10	24	6
Encephalitis Lethargica, - - -	37	9	1	1	3	1
Infective Jaundice, - - -	3	—	—	—	—	—
* Measles, - - - -	—	19	—	3	—	—
* Whooping-Cough, - - -	—	33	—	3	—	8
Chickenpox, - - - -	704	—	97	—	61	—

* Not being notifiable the number of cases cannot be ascertained.

Diphtheria.

A—Cases per 10,000 population.

B—Deaths per 10,000 population.

C—Deaths per 100 cases.

	Middle Ward.			Upper Ward.			Lower Ward.		
	A.	B.	C.	A.	B.	C.	A.	B.	C.
1891-95, -	13·9	4·9	35·1	20·0	3·69	17·8	7·5	2·47	32·6
1896-1900, -	8·5	2·0	24·3	22·0	1·46	6·53	8·4	1·73	20·4
1901-05, -	8·0	1·8	22·3	16·0	1·6	10·3	11·0	1·5	13·5
1906-10, -	19·3	2·0	10·8	36·6	1·74	4·75	26·0	1·9	7·2
1911-15, -	16·3	1·5	9·9	21·8	1·83	8·40	23·0	1·9	8·6
1916-20, -	14·2	1·3	10·0	18·0	1·5	8·5	12·0	1·2	9·7
1921-25, -	13·1	1·3	9·6	16·3	0·8	5·1	15·0	0·9	6·3
1926, -	14·9	0·7	4·5	22·2	0·8	3·7	23·8	1·9	8·1
1927, -	19·6	0·4	2·1	17·3	0·8	4·8	28·7	0·6	2·3

In the Middle Ward District 463 cases were notified, compared with 355 in the preceding year, but the fatality rate is the lowest recorded in that area.

In the Upper Ward District 83 cases were notified, compared with 107 in the previous year.

In the Lower Ward District 67 cases were notified, a decrease of 7 compared with the previous year.

Scarlet Fever.

A—Cases per 10,000 population.

B—Deaths per 10,000 population.

C—Deaths per 100 cases.

	Middle Ward.			Upper Ward.			Lower Ward.		
	A	B	C	A	B	C	A	B	C
1891-95, -	74.2	2.2	3.06	78.8	1.77	2.3	55.1	2.6	4.6
1896-1900,	61.3	2.4	3.98	82.7	2.28	2.7	58.5	2.4	4.0
1901-05, -	34.4	1.3	3.90	45.6	0.97	2.13	29.6	0.9	2.9
1906-10, -	46.7	1.1	2.54	55.2	0.70	1.27	42.1	1.2	2.7
1911-15, -	57.0	1.3	2.43	60.3	1.14	1.9	59.0	1.6	2.8
1916-20, -	43.6	0.9	2.61	35.0	0.5	1.5	21.0	0.2	1.2
1921-25, -	50.7	0.9	1.9	65.6	1.09	1.6	27.7	0.2	0.9
1926, -	37.0	0.4	1.25	30.7	0.2	0.6	25.4	0.6	2.5
1927, -	23.1	0.2	0.92	22.5	—	—	22.3	1.0	4.5

In the Middle Ward District the number of cases notified was 545, compared with 877 last year.

In the Upper Ward District 108 cases were notified, compared with 148 last year.

In the Lower Ward District 67 cases were notified, compared with 79 the previous year.

With the exception of the Lower Ward District the fatality rate was the lowest recorded, the type of disease being mild.

Typhoid or Enteric Fever.

A.—Cases per 10,000 population.

B.—Deaths per 10,000 population.

C.—Deaths per 100 cases.

	Middle Ward.			Upper Ward.			Lower Ward.		
	A.	B.	C.	A.	B.	C.	A.	B.	C.
1891-95, -	30.9	4.2	11.95	12.2	1.5	12.4	14.0	2.2	15.5
1896-1900,	20.7	2.6	12.73	6.9	1.2	17.6	11.3	1.5	13.0
1901-05, -	15.6	2.1	13.54	4.9	0.9	18.8	8.8	1.2	13.3
1906-10, -	10.4	0.9	9.40	2.9	0.5	17.4	7.6	0.6	8.4
1911-15, -	5.4	0.5	11.09	1.4	0.3	23.3	2.5	0.5	19.2
1916-20, -	4.0	0.5	12.74	0.7	0.02	5.9	1.7	0.06	3.8
1921-25, -	2.4	0.2	10.4	0.2	0.04	25.0	0.5	0.06	12.5
1926, -	0.7	0.12	16.6	—	—	—	1.3	0.3	25.0
1927, -	0.3	0.08	25.0	—	—	—	—	—	—

Cases of this disease are now of rare occurrence, there being only eight notifications received during the year under review. In four of these cases the diagnosis was revised.

Measles and Whooping-Cough.

DEATH-RATES PER 10,000 OF THE POPULATION.

MEASLES.				WHOOPIING-COUGH.		
	Middle Ward.	Upper Ward.	Lower Ward.	Middle Ward.	Upper Ward.	Lower Ward.
1891-95, -	9.3	3.4	5.2	6.2	5.6	2.8
1896-1900, -	6.5	2.2	6.2	5.2	2.9	5.3
1901-05, -	4.2	0.5	4.8	5.7	2.3	6.3
1906-10, -	5.7	2.1	4.5	4.8	2.7	5.4
1911-15, -	5.3	0.8	3.0	6.1	1.6	3.4
1916-20, -	4.4	1.3	2.0	3.9	1.8	2.6
1921-25, -	3.2	1.1	1.4	4.3	2.5	1.8
1926, -	2.9	1.2	1.6	1.0	—	0.3
1927, -	0.8	0.6	—	1.4	0.6	2.6

The decrease in the number of deaths from measles is very gratifying. The deaths from whooping-cough have also decreased when compared with the figures for quinquennial periods, but show an increase over last year's figures which were exceptionally low. 48.5 per cent. of the deaths from measles and whooping-cough were of infants under one year of age, and 95.4 per cent. of children under five years of age.

Pulmonary Tuberculosis.

Morbidity. A—Cases per 10,000 population.

Mortality. B—Deaths per 10,000 population.

Fatality. C—Deaths per 100 cases.

	Middle Ward.			Upper Ward.			Lower Ward.		
	A.	B.	C.	A.	B.	C.	A.	B.	C.
1891-95 -	—	13.5	—	—	12.0	—	—	12.8	—
1896-1900, —	—	11.4	—	—	11.9	—	—	11.7	—
1901-05, -	—	10.0	—	—	10.5	—	—	12.4	—
1906-10, -	14.6	8.8	60.3	8.4	8.1	97.2	12.2	11.3	87.7
1911-15, -	16.2	8.1	50.3	11.4	7.0	64.0	14.5	6.8	47.4
1916-20, -	16.4	7.5	46.1	9.6	6.3	65.1	14.0	7.3	52.4
1921-25, -	17.2	5.9	39.6	8.8	4.8	54.9	14.3	5.8	40.7
1926, -	16.3	5.3	32.2	6.6	4.3	65.6	18.4	6.8	36.8
1927, -	14.3	4.8	33.4	9.2	5.8	63.6	10.3	5.3	51.6

Non-Pulmonary Tuberculosis.

Morbidity. A—Cases per 10,000 population.

Mortality. B—Deaths per 10,000 population.

Fatality. C—Deaths per 100 cases.

	Middle Ward.			Upper Ward.			Lower Ward.		
	A.	B.	C.	A.	B.	C.	A.	B.	C.
1891-95, -	—	9·7	—	—	6·2	—	—	7·1	—
1896-1900,	—	8·9	—	—	4·4	—	—	6·8	—
1901-05,	—	8·2	—	—	4·9	—	—	7·2	—
1906-10,	—	8·9	—	—	4·4	—	—	7·6	—
1911-15,	—	6·9	—	—	2·8	—	—	5·8	—
1916-20,	16·3	5·3	32·4	5·6	3·3	60·0	10·3	3·5	35·5
1921-25,	20·8	4·8	23·2	6·7	2·9	44·3	10·7	2·6	24·2
1926,	20·1	3·9	19·4	6·6	2·3	34·3	8·4	2·2	26·9
1927,	16·7	3·1	18·8	5·0	2·1	41·6	8·0	2·0	25·0

Although the number of cases notified remains steady for both pulmonary and non-pulmonary tuberculosis, the deaths per 10,000 of the population show a remarkable reduction.

Institutional Accommodation.

All the institutional accommodation in the County is provided by each of the three District Committees, and details of the work carried out at the various institutions are given in the District Reports. The following tabular statement shows the institutions throughout the County and the nature of the work carried out:—

INSTITUTION.

Nature of Work.

Middle Ward District—

County Hospital, Motherwell,

All forms of acute infectious disease; surgical tuberculosis; indoor and outdoor treatment of venereal diseases; X-rays, with radiographic equipment. Recognised as a training school for nurses by the General Nursing Council.

Hairmyres Colony,
by East Kilbride,

Treatment and training of adult cases of tuberculosis; light treatment; artificial pneumothorax treatment and education of children; especially those in early stages of the disease and those in whom the disease is quiescent.

INSTITUTION.	Nature of Work.
<i>Middle Ward District—</i>	
County Orthopædic Hospital, Stonehouse,	Non-pulmonary forms of tuberculosis, including orthopædic treatment—both sexes. X-ray, with radiographic equipment.
County Sanatorium, Shotts,	Pulmonary tuberculosis—both sexes. Out patient clinic with artificial light treatment.
County Sanatorium, Uppertown, Longriggend,	Pulmonary tuberculosis—both sexes. Artificial light treatment.
County Hospital, Bellshill,	Maternity Hospital for simple and complicated cases of labour. Has special wards for ante-natal and post-natal cases. Recognised by the Central Midwives Board as a training school for midwives.
County Convalescent Home, Calderbank House, Baillieston.	For mothers and children under 5 years requiring convalescent treatment.
County Hospital, Blantyre,	For mothers and babies.
County Hospital, Dalserf,	This small hospital is used for emergency purposes, but during the year was used in connection with the County Orthopædic Hospital, Stonehouse.
<i>* Upper Ward District—</i>	
District Sanatorium, Roadmeetings, Carluke,	Pulmonary Tuberculosis—both sexes.
<i>Lower Ward District—</i>	
†Lightburn Joint-Hospital, Shettleston,	All forms of acute infectious disease; one pavilion is set aside entirely for the treatment of Lower Ward tuberculosis patients. Recognised as a training school for nurses by the General Nursing Council.

* Upper Ward acute infectious diseases are admitted to the Lanark Burgh Hospital by arrangement with the Lanark Town Council when accommodation is available pending the provision of a new district isolation hospital.

† This institution is owned jointly by the Lower and Middle Ward District Committees and by the Corporation of Glasgow in the following proportions: Lower Ward, $\frac{2}{3}$ ths; Middle Ward, $\frac{2}{3}$ ths; and Glasgow, $\frac{1}{3}$ th.

Venereal Diseases.

Since the year 1921 a joint-scheme has been in operation in the County of Lanark, this scheme including the Burghs of Airdrie, Coatbridge, Hamilton, Motherwell and Wishaw, Rutherglen, Lanark,

Biggar, and Kirkintilloch. In the County area there is now only one clinic, viz., County Hospital, Motherwell, and an irrigation station at Shotts. In addition to the clinic in the County area, there are also three clinics situated in the Burgh areas, viz., Coatbridge, Wishaw, and Hamilton.

The following tabular statement shows the number of new cases belonging to the County area dealt with at these centres:—

	Middle Ward.		Upper Ward.		Lower Ward.	
	M.	F.	M.	F.	M.	F.
Syphilis, ...	24	12	—	—	—	—
Gonorrhœa, ...	86	27	17	5	1	3
Mixed Infection,	—	1	—	—	—	—
Soft Sores and others,	58	10	4	5	2	—
	168	50	21	10	3	3

These cases were treated at the following centres: — Motherwell, 174; Hamilton, 27; Wishaw, 34; Coathill, 20.

Maternity Service and Child Welfare.

The schemes drawn up under the Notification of Births (Extension) Act, 1915, are all administered by the respective District Committees, and the details of the work carried out under these schemes are given in the District Reports. Two Medical Officers are employed by the Middle Ward District Committee to devote the whole of their time to this work, and the Assistant Health Officers also act as Medical Officers at various centres. In addition to the staff of Nurse Health Visitors employed by the District Committees, the services of District Nurses are obtained in certain rural areas as part-time Health Visitors.

Details of the work carried out at Bellshill Maternity Hospital, Calderbank Convalescent Home, and the small Institution at Blantyre are given in the Report for the Middle Ward District.

Housing.

The number of *Occupied* and *Unoccupied Houses* as given in the Valuation Roll, for each year since 1921, was as follows:—

Year	1921	1922	1923	1924	1925	1926	1927
UPPER WARD—							
Occupied, -	9,754	9,858	10,109	10,225	10,218	10,165	10,152
Unoccupied,	112	102	110	117	135	164	361
MIDDLE WARD—							
Occupied, -	41,565	42,507	44,020	44,836	44,928	44,988	44,716
Unoccupied,	157	706	554	356	362	299	541
LOWER WARD—							
Occupied, -	5,779	5,842	6,092	6,322	6,433	5,958	6,153
Unoccupied,	14	18	53	16	42	29	73
COUNTY—							
Occupied, -	57,098	58,207	60,221	61,383	61,579	61,111	61,021
Unoccupied,	283	826	717	489	539	492	975
TOTAL HOUSES,	57,381	59,033	60,938	61,872	62,118	61,603	61,996

At Tarbrax, in Carnwath Parish, there were over 200 empty houses of good modern construction, this being due to the closing of the shale mines. The majority of the other unoccupied houses comprised mansion houses and houses about farm steadings.

Details of the houses erected under the various subsidy schemes are given in the District Reports.

The progress made in the introduction of modern domestic and sanitary conveniences to existing dwellings is also referred to in detail in the Reports of the District Sanitary Inspectors.

Milk (Special Designations) Order (Scotland), 1923.

On 31st December, 1927, the number of licence-holders in the County of Lanark was as follows:—

Producer's Licence—

Certified milk, ...	...	...	...	...	17
Grade A (T.T.) milk, ...	...	...	...	...	18
Grade A milk, ...	...	...	...	...	4
Pasteurised milk, ...	...	...	...	...	1

Dealer's Licence—

Certified milk, ...	...	...	...	...	2
Grade A (T.T.) milk, ...	...	...	...	...	2
Certified milk, Grade A (T.T.) milk, and Pasteurised milk, ...	...	...	...	...	1
Grade A (T.T.) milk and Grade A milk, ...	...	...	...	...	1
Pasteurised milk, ...	...	...	...	...	3

A tabular statement is given in the District Reports with the names of the licence-holders for the various grades produced in the County.

The clinical examination and tuberculin tests have been carried out periodically by the District Veterinary Surgeon. Samples of milk have been taken by the Food and Drugs Inspector throughout the year, and these were examined in the Bacteriological and Chemical Laboratories.

As a large experience has now been gained in the administration of the above Order in the County of Lanark, I think it desirable to set forth the difficulties experienced in carrying out the conditions of the Order.

APPLICATION FOR LICENCE AND PRODUCTION OF A VETERINARY SURGEON'S CERTIFICATE.

Section 5 (2).—"Before granting a licence to a producer, the Local Authority shall require him to produce a Veterinary Surgeon's Certificate showing the results of an examination of the herd (or, in the case of Grade A Milk, of the milch cows belonging to the herd) carried out within one month before the date of the application, and, in addition, in any case in which the conditions of the licence if granted, would include the prescribed tuberculin test, a certificate of a prescribed tuberculin test of the herd carried out within a period of three months."

This appears to imply that before a licence is granted a certificate must be obtained from the *nominated* Veterinary Surgeon, as the "prescribed tuberculin test" can only be carried out by a nominated Veterinary Surgeon. This means that even although a producer may have had his herd tested by his own Veterinary Surgeon in a manner equivalent to the "prescribed tuberculin test" just prior to making application for a licence the "prescribed tuberculin test" will require to be again carried out by the nominated Veterinary Surgeon, involving unnecessary expense, time of officials, and delay in granting the licence.

It is my opinion that the onus of clearing his herd of animals reacting to the tuberculin test should be put on the farmer, by the aid of his own Veterinary Surgeon, before he makes application for a licence, and that the certificate granted by his Veterinary Surgeon, provided a test equivalent to the prescribed test has been carried out, should be accepted in granting a licence. *All the subsequent tests and the necessary clinical examinations should be carried out by the nominated Veterinary Surgeon.*

LICENCE FEES.

No fee should be charged for graded licences, as every encouragement should be given to dairy keepers to produce or sell graded milk. It is an undoubted advantage to the Public Health Authority to have milk of this class sold or produced in the district, and it would be no hardship on the Authority to grant a licence without fee. The charging of a fee is really a penalty on the farmer who is producing clean milk, whereas the careless farmer can produce dirty milk without any such penalty.

BACTERIOLOGICAL STANDARD.

In view of our experiences in the bacteriological examination of samples of milk taken at all stages, viz., at the farm, in course of transit, and before and after delivery to the consumer, I would suggest that the standard set up for Grade A (T.T.) Milk should be reduced to not more than 100,000 bacteria per cubic centimetre and no coliform bacillus in one-tenth of a cubic centimetre. From the results obtained in the County of Lanark, which are given in the table appended, there should be no difficulty in producing milk of this standard, and when one considers that Grade A (T.T.) Milk is produced under practically the same conditions as Certified Milk there is far too great a difference between the two standards.

MILK SOLD AS LOWER GRADE THAN THAT FOR WHICH THE LICENCE IS GRANTED.

Section 14.—"Notwithstanding anything contained in this Order, "a licence permitting a producer to sell milk produced by him as "Certified shall entitle him to sell such Certified Milk as Grade A " (Tuberculin Tested) or as Grade A, and a licence permitting a "producer to sell milk produced by him as Grade A (Tuberculin "Tested) shall entitle him to sell such Grade A (Tuberculin Tested) "Milk as Grade A."

I am of opinion that if milk is sold as a lower grade of milk than that for which the producer holds a licence, such milk should comply with the bacteriological and chemical standard of the grade for which the licence is granted.

In certain cases where a graded milk licence has been obtained the producer finds difficulty in retailing such milk and getting any extra price for same. The milk is therefore sold as *Ordinary Milk*, and in such cases it is difficult for the Sampling Officer to obtain a

sample of graded milk from the retail van. In the event of a sample obtained being above the standard in bacterial content, and containing less than 3·5 per cent. of fat, no action can be taken with regard to the licence, as the milk is sold as Ordinary Milk. Provision should therefore be made for such milk being sold as Ordinary Milk, but if samples taken showed that the milk did not comply with the standard, either bacteriologically or chemically, for the particular grade of licence which the producer holds, the Local Authority should have power to discontinue the licence.

BOTTLING AND CAPPING.

Third Schedule.

Part 1 (3).—"Immediately after being bottled the milk in the "bottle shall be covered with a suitable tightly fitting disc and the "bottle shall be covered with a suitable outer cap overlapping the "lip of the bottle and so fastened as to form a complete seal. The "cap shall bear the name and address of the producer or of the "premises where the milk is produced, the day of production and "the words 'Certified Milk.' The words 'Produced from cows which "'have passed the tuberculin test' may be added, but, except with "the consent of the Local Authority, the cap shall bear no other "words."

Part 3 (2).—"Except where the milk is bottled by the producer "in accordance with the procedure for bottling hereinafter specified, "the milk shall be consigned from the premises where it is produced "in an unventilated sealed container which shall be labelled or "marked in a suitable manner with the address of the premises, the "day of production (with the word 'morning' or 'evening' "according to the time of milking), and the words 'Grade A Milk.'"

It has been brought to my notice that it is a hardship on the producer to state on the cap the day of production, and I have sympathy with this point of view. The usual practice in Lanarkshire is to sell the previous evening's milk and the morning milk at the same time. The vendor has, therefore, milk in his cart produced on two different days, say, "Tuesday" and "Wednesday." As customers naturally wish to have Wednesday morning milk it is a difficult matter for him to sell the previous evening's milk. I would therefore suggest that it be not necessary to state the day of production on the outer cap. *The bacterial standard*, which has to be complied with in order that the licensee can retain his licence, *is sufficient indication that the milk is in a good and wholesome condition* when sold.

SCORE CARD.

I am of opinion that no licence should be granted if any division of the score card, viz.:—Water, cowshed (construction), &c., falls below 50 per cent. of the total marks for that division, *i.e.*, the total points attainable for cowshed (construction) are 12, but only 5 marks might be obtained, and yet the score card may have a total of over 50 marks with one of the most important items defective.

GRADE A MILK.

I am of opinion that the special designation "Grade A" should be discontinued, and all milk made to conform to the bacterial standard laid down for such milk. A large number of samples of ordinary milk taken at all seasons have now been examined bacteriologically in the County Laboratory, and the results of these examinations, which are given in a table appended, show that, with a little care on the part of producers and their milkers, the standard of Grade A can easily be maintained. The title "Grade A" is also misleading to the public, as quite a number are under the impression that this is the topmost grade.

PASTEURISED MILK.

A standard should be made for the raw milk to ensure cleanliness. It has been our experience to find samples of raw milk sent to a creamery for pasteurisation to contain over 3,000,000 germs per c.c. When this milk is pasteurised, the bacterial content may be reduced to 100,000 per c.c. or under, but it could not be held to be clean milk, as the only reliable proof of clean milk is the number of live germs present before the milk is subjected to any artificial treatment. Such procedure discourages cleanliness unless there is a standard for the raw or unheated milk.

In my opinion, the standard set for pasteurised milk, viz., 100,000 bacteria per c.c., is much too high, and a standard should also be set up for coliform bacilli. If pasteurisation is effective there should be no difficulty in complying with a lower standard. On quite a number of occasions we have found coliform bacilli present in one-hundreth of a c.c. and one-thousandth of a c.c. where the milk was stated to have been pasteurised.

In one case in this County a licence was granted to a Creamery Company for the sale of pasteurised milk. So far as I am aware this milk was *not sold* as "Pasteurised Milk" and did not contain

any label that the milk had been pasteurised. The milk was sold in various retail shops throughout the County, but when a sample was taken by the Sampling Officer and found not to comply with the standard for "Pasteurised Milk" no action could be taken as the milk was sold as ordinary milk.

All milk which has been heated in any way or put through a pasteurising process should be suitably labelled with the words "Heated" or "Pasteurised Milk," as the public ought to be made aware of the fact that the milk has been treated by heat and is not milk as it came from the cow.

CONCLUSION.

I understand that the Milk (Special Designations) Order (Scotland), 1923, was made to ensure the production of clean and tubercle-free milk, according to the bacteriological standards laid down in the Order. Therefore, unless these standards are complied with by every licence-holder, whether he sells his milk according to his licence or as ordinary milk, the whole Order becomes a farce, entailing much waste of time and labour, also expenditure in supervision, and in the procuring and examining of samples for no purpose.

The following tables give the results of bacteriological and chemical examination of samples of graded milk taken during the period 1st January, 1923, to 31st December, 1927:—

MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1923.

RESULT OF BACTERIOLOGICAL EXAMINATION OF SAMPLES OF MILK TAKEN BY THE OFFICIAL SAMPLERS FROM GRADED LICENCE HOLDERS IN THE COUNTY OF LANARK DURING THE PERIOD FROM 1ST JANUARY, 1923, TO 31ST DECEMBER, 1927.

Blood Heat Organisms per c.c.	Certified.	Grade A (T.T.)	Grade A.
Under 1,000,	15	—	—
„ 2,500,	41	49	6
„ 5,000,	54	62	10
„ 10,000,	39	72	10
„ 20,000,	21	66	6
„ 30,000,	6	21	4
„ 50,000,	3	22	—
„ 75,000,	—	7	3
„ 100,000,	—	1	—
„ 150,000,	—	5	3
„ 200,000,	—	1	1
Over 200,000.	1	3	1
Obscured by moulds, ...	3	—	—
	183	309	44
Coliform Bacilli present			
in One tenth of a c.c.,	21	—	—
in One-hundredth of a c.c.,	—	10	1

MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1923.

RESULT OF CHEMICAL EXAMINATION OF SAMPLES OF MILK TAKEN BY THE OFFICIAL SAMPLERS FROM GRADED LICENCE HOLDERS IN THE COUNTY OF LANARK DURING THE PERIOD FROM 1ST JANUARY, 1923, TO 31ST DECEMBER, 1927.

Milk Fat per cent.	Certified.	Grade A (T.T.)	Grade A.	Non-fatty solids per cent.	Certified.	Grade A (T.T.)	Grade A.
3.0	—	—	—	8.0	—	—	—
3.1	—	1	—	8.1	—	—	—
3.2	3	1	—	8.2	—	—	—
3.3	1	2	1	8.3	—	—	—
3.4	8	8	—	8.4	2	—	—
3.5	11	10	2	8.5	1	—	—
3.6	13	12	4	8.6	2	4	—
3.7	15	24	5	8.7	9	9	3
3.8	20	29	8	8.8	16	16	3
3.9	22	30	4	8.9	26	25	8
4.0	20	38	6	9.0	21	59	5
4.1	8	40	2	9.1	24	42	3
4.2	17	35	3	9.2	28	58	13
4.3	12	29	1	9.3	24	35	6
4.4	14	18	2	9.4	13	34	2
4.5	10	13	1	9.5	10	14	1
Over 4.5	9	19	5	Over 9.5	7	13	—
—	183	309	44	—	183	309	44

Cleanliness of Non-Graded Milk.

During the *years* 1924-27, 438 samples of milk taken informally under the Food and Drugs Acts were examined bacteriologically. The results of examination, which are given in the table appended, showed that 275 or 62.7 per cent. of these samples complied with the standard laid down for Grade A (T.T.) Milk and Grade A Milk, and a large number also complied with the standard laid down for Certified Milk.

There is therefore, no hardship in asking all dairy farmers to comply with this standard, as these figures show that, with care, this could easily be obtained. The 163 samples above the standard did not comply with it in the following respects:—

Samples containing over 200,000 blood heat organisms per c.c. and coliform bacilli present in .01 of a c.c. or .001 of a c.c.,	31
---	----

Samples containing over 200,000 blood heat organisms per c.c.,	44
--	----

Samples with coliform bacilli present in .01 or .001 of a c.c.,	88
---	----

163

As will be seen from the table 200 samples were taken during the months April to September, and 238 were taken during the months of October to March. During the summer months the percentage of samples above the bacteriological standard was slightly higher than the winter months. The percentage, however, complying with the standard during the summer months shows that even under summer conditions a standard such as that required for graded milk could be easily complied with.

Where a sample of ordinary milk is found to contain a large number of bacteria per c.c. or coliform bacilli is present in .001 c.c. a Sanitary Inspector is instructed to visit the farm concerned at milking time, and report with regard to the cleanliness of the premises and the methods employed. At the same time he suggests any improvement which he may consider will give cleaner milk. This has always had the desired effect, and subsequent samples taken have shown a satisfactory improvement.

The Food and Drugs Inspector has been supplied with a sediment tester, which he utilises when taking a sample of milk to impress the producer with regard to the cleanliness to the naked eye. Should the pad, after filtration, show marked evidence of "visible" or insoluble dirt, it is exhibited and explained to the farmer at once.

**RESULTS OF BACTERIOLOGICAL EXAMINATION OF ORDINARY MILK SAMPLES
TAKEN IN THE COUNTY OF LANARK FROM 1ST JANUARY, 1924, TO
31ST DECEMBER, 1927.**

			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Total
Under	10,000	- -	7	18	18	28	71
„	30,000	- -	3	32	17	51	103
„	50,000	- -	8	13	8	42	71
„	100,000	- -	4	16	9	44	73
„	200,000	- -	2	8	18	17	45
„	300,000	- -	—	7	4	10	21
„	500,000	- -	—	2	9	12	23
„	1,000,000	- -	—	9	3	4	16
Over	1,000,000	- -	—	5	4	6	15
			24	110	90	214	438

Coliform bacilli present—

In one-tenth of a c.c.,	4	18	17	41	80
In one-hundredth of a c.c., - -	2	17	27	30	76 .
In one-thousandth of a c.c., - -	—	8	15	20	43

Veterinary Inspection of Dairy Herds.

The inspection of dairy herds throughout the County was carried out, as formerly by the Veterinary Inspector and his Assistant, and his Report is incorporated in this volume. As on former occasions, samples of milk were drawn from all udders which, upon examination, showed conditions suspicious of any disease liable to infect or contaminate the milk. In this way 895 samples were taken and examined in the Bacteriological Laboratory, where 84 of these were found to contain tubercle bacilli and 234 found to contain other infectious organisms. The animals from which the samples were drawn containing tubercle bacilli were slaughtered forthwith under the Tuberculosis Order. In connection with the samples found to contain other infectious organisms, letters were sent to the owners of the animals pointing out that it was an offence to sell milk from such a cow for human consumption, and asking them what they were doing to comply with the statute.

Bacteriological Laboratory.

JAS. L. BROWNLIE, M.D., D.P.H.

The following table shows the total number of specimens dealt with since the opening of the Laboratory in 1903, and the sources of supply:—

RECORD OF WORK DONE SINCE 1903.

Year.	Specimens.	Sources of Supply.					
		Med. Pract.	P.H. Staff.	Hosp. Staff.	Sch. Med. Staff.	Vet. Surgeons.	Slaugh. Staff.
1903	569	...	...	...	...	...	...
1904	791	...	...	...	...	...	...
1905	1,270	...	...	...	...	...	...
1906	2,061	1,651	142	209	...	59	...
1907	5,678	2,739	1,794	1,094	...	40	11
1908	8,311	4,310	1,813	1,911	...	249	28
1909	7,774	3,202	1,148	3,041	...	336	47
1910	6,945	2,951	406	3,200	29	322	37
1911	5,949	2,890	494	2,250	99	191	25
1912	6,715	3,542	753	2,193	91	117	19
1913	6,199	3,006	627	2,190	120	244	12
1914	7,193	2,481	1,314	2,985	96	295	22
1915	6,497	2,370	1,212	2,848	2	52	13
1916	3,730	2,161	535	952	...	79	3
1917	4,725	1,990	480	2,136	...	117	2
1918	6,283	1,941	745	3,514	...	81	2
1919	8,595	2,741	1,219	4,446	23	166	...
1920	9,162	3,075	1,205	4,483	90	302	7
1921	10,409	3,118	1,794	5,139	67	285	6
1922	9,702	3,108	2,475	3,803	41	243	31
1923	10,485	3,294	2,062	4,785	84	241	19
1924	11,030	3,537	2,280	4,936	70	189	18
1925	11,193	3,758	2,495	4,517	56	357	10
1926	17,327	6,472	2,769	7,232	49	796	9
1927	19,331	6,382	3,759	8,097	33	1,053	7

The following table shows the specimens received from the three sanitary districts of the County and from other areas:—

	Upper Ward.		Middle Ward.		Lower Ward.		County Total		Other Areas.		Total.	
	+	o	+	o	+	o	+	o	+	o	+	o
SPECIMENS OF HUMAN ORIGIN—												
Tuberculosis, -	82	111	798	2,238	225	170	1,105	2,519	180	424	1,285	2,943
Typhoid Fever, —	1		13	149	—	1	13	151	2	38	15	189
Diphtheria, -	113	663	892	5,031	305	1,980	1,310	7,674	240	969	1,550	8,643
Cerebro-Spinal Meningitis, —	—	—	6	12	—	—	6	12	1	—	7	12
Venereal Diseases, -	5	18	132	1,130	10	59	147	1,207	185	449	332	1,656
Miscellaneous, —	17	11	347	480	12	6	376	497	99	67	475	564
SPECIMENS FROM ANIMALS—												
Tuberculosis, -	25	332	62	447	12	93	99	872	3	99	102	971
Anthrax, -	5	—	6	—	—	—	11	—	—	1	11	1
Scabies, -	—	3	7	11	—	1	7	15	—	—	7	15
Miscellaneous, —	6	3	6	4	—	—	12	7	3	—	15	7
Milk for bacterial count, -	185		286		23		494		37		531	
TOTAL, -	1,580		12,057		2,897		16,534		2,797		19,331	

The specimens from other areas were received from the following Local Authorities:—Hamilton, 724; Motherwell and Wishaw, 259; Airdrie, 351; Coatbridge, 526; Rutherglen, 411; Kirkintilloch, 78; Lanark, 243; Biggar, 22; Dumbarton, 26; and other Authorities, 157.

Tubercle.

4,228 specimens were examined for the presence of *B. tuberculosis*, with the following results:—

	Sputa.		Urines.		Others.	
	+	o	+	o	+	o
Medical Practitioners—County, -	87	554	—	20	—	13
„ „ Burghs, -	178	409	1	6	1	9
Hospital Physicians, -	920	1,530	1	12	10	57
Public Health Staff, -	84	329	1	3	2	1
	1,269	2,822	3	41	13	80

The following table is inserted as a matter of interest in connection with the question of the reliability of direct microscopic examination as against animal inoculation in the search for *B. tuberculosis*. It will

be seen that out of a total of 168 submitted to both methods of examination 20 were missed by the microscope.

	Sputa.		Urines.		Others.	
	+	o	+	o	+	o
Direct Film Examination, - -	—	89	—	25	—	54
Animal Examination, - - -	2	87	3	22	15	39

Of the 15 positive "others" 5 were specimens of cerebro-spinal fluid and 10 were specimens of pus.

Typhoid Fever.

204 specimens were examined, with the following results :—

	Agglutination Test.		Blood Cultures.		Fæces.		Urines.	
	+	o	+	o	+	o	+	o
Medical Practitioners—								
County, - -	3	38	—	—	—	2	—	1
Burghs, - -	2	37	—	—	—	1	—	—
Hospital Physicians, -	10	18	—	16	—	12	—	1
Public Health Staff, -	—	56	—	—	—	3	—	4
	15	149	—	16	—	18	—	6

Diphtheria.

10,193 specimens were examined from the following sources :—

	Throat.		Nose.	
	+	o	+	o
Medical Practitioners—County,	305	2,168	—	1
„ „ Burghs,	232	909	8	60
Hospital Physicians, - - -	699	2,710	166	730
Public Health Staff, - - -	138	2,049	2	16
	1,374	7,836	176	807

Of the primary swabs examined in direct smear preparation, 131 gave positive results.

Cerebro-Spinal Meningitis.

19 specimens were examined for the presence of the meningococcus, with positive results in 7 cases.

Venereal Diseases.

Syphilis.—1,558 specimens were submitted to the Wassermann test for syphilis, and gave the following results:—

					Blood.	
					+	o
Medical Practitioners—County,	-	-			27	131
„ „ Burghs,	-	-			158	366
Hospital Physicians, -	-	-	-	-	92	731
Public Health Staff, -	-	-	-	-	3	50
					<hr/> 280	<hr/> 1,278
					<hr/>	<hr/>

Treponema Pallidum.—4 specimens were examined, with negative results.

Gonorrhœa.—214 specimens were examined, with the following results:—

					Smears.	
					+	o
Medical Practitioners—County,	-	-			16	65
„ „ Burghs,	-	-			26	79
Hospital Physicians, -	-	-	-	-	3	14
Public Health Staff, -	-	-	-	-	1	10
					<hr/> 46	<hr/> 168
					<hr/>	<hr/>

Ophthalmia Neonatorum.—212 specimens were examined for the presence of gonococci, and 6 of these gave positive results. Of the 206 specimens giving negative results, 59 showed staphylococci, 4 streptococci, 33 B. Xerosis, 18 Koch-Weeks bacillus, 14 Fraenkel's pneumococcus, 1 Morax-Axenfeld's bacillus, and 77 no bacteria.

Miscellaneous Specimens.

Vaccines.—100 were prepared, 95 for medical practitioners, 3 for hospital physicians, and 2 for public health staff. These were for the treatment of boils, acne, bronchitis, asthma, cystitis, &c.

Vincent's Angina.—118 specimens were examined, with positive results in 54.

Puerperal Fever.—83 blood cultures were examined, with 9 positive results.

Urine for Albumin.—210 specimens gave 88 positive results.

Others.—The other miscellaneous specimens included pus and urine for pathogenic bacteria; fæces for dysentery, intestinal worms, and ova; blood films for malaria and other blood diseases; hairs for ringworm; foodstuffs for the food-poisoning group of organisms; and potable and bath waters.

Specimens from Animals.

Milk for Tubercle.—1,045 samples of milk were received from various Veterinary Inspectors and the Public Health Staff, of which 66 were found positive by microscopic examination.

Oral Mucus.—18 specimens were examined, and acid-alcohol-fast bacilli were found in 11.

			Milk.		Oral Mucus.		Others.		
			+	o	+	o	+	o	
			Smear.	Biolo- gical.					
Upper Ward,	-	-	21	3	331	—	1	1	—
Middle „	-	-	37	15	433	9	6	1	8
Lower „	-	-	8	2	93	2	—	—	—
Other Areas.	-	-	—	3	99	—	—	—	—
			66	23	956	11	7	2	8

All the above 1,045 samples of milk were also examined for other deleterious organisms (streptococci, &c.), with positive results in 258.

403 of the specimens found negative on microscopic examination were submitted to animal inoculation, and 23 gave positive results.

Anthrax.—11 specimens were submitted by the County Veterinary Inspector, and all were positive. 1 spleen examined for the slaughter-house staff was negative.

Scabies.—22 specimens were examined, with positive results in 7.

Others.—22 specimens were examined, with positive results in 15 cases—tumour formation, 4; deleterious organisms, 7; actinomycosis, 1; contagious abortion, 3.

Bacterial Content of Milk.—The results of the examination of 531 samples are classified as under :—

	Certified Milk.	Grade "A" (TT) Milk.	Grade "A" Milk.	Pasteurised Milk.	Ordinary Milk.
Under 5,000 bacteria per c.c.	88	60	7	9	20
„ 10,000 „ „	23	30	4	4	27
„ 20,000 „ „	16	27	4	1	27
„ 30,000 „ „	1	8	1	1	25
„ 100,000 „ „	1	5	—	2	60
„ 200,000 „ „	1	1	—	1	22
Over 200,000 „ „	7	1	—	1	46
Totals,	137	132	16	19	227
Coliform Bacillus present,	20	10	1	5	94

Included in the above totals are 3 certified, 1 Grade "A," 5 pasteurised, and 28 ordinary samples of milk from areas other than the County. They are classified as under :—

	Certified Milk.	Grade "A" Milk.	Pasteurised Milk.	Ordinary Milk.
Under 5,000 bacteria per c.c.,	1	1	1	2
„ 10,000 „ „	2	—	3	3
„ 20,000 „ „	—	—	—	3
„ 30,000 „ „	—	—	—	3
„ 100,000 „ „	—	—	1	6
„ 200,000 „ „	—	—	—	3
Over 200,000 „ „	—	—	—	8
Coliform bacillus present,	3	1	1	14

Destruction of Rats.

1,502 bottles of rat virus were supplied, free of charge on application, to farmers, householders, shopkeepers, &c.

Chemical Laboratory.

WALTER BROWN, F.C.S.

The number of samples analysed or examined during the year amounted to 3,772, an increase of 1,459 over last year.

The following table shows for each year since 1920 the number of samples analysed :—

SAMPLES EXAMINED IN THE CHEMICAL LABORATORY CLASSIFIED ACCORDING
TO ADMINISTRATIVE AUTHORITY UNDER WHICH THEY WERE OBTAINED.

Year.	Rivers Pollution.			Public Health Department.		Food and Drugs.	Total.
	Sewage Works.	Trade Effluents.	Streams.	Water Supplies.	Special.		
1920	26	123	142	26	28	217	562
1921	20	54	62	20	97	201	454
1922	50	38	66	32	60	318	564
1923	52	48	84	17	117	155	473
1924	12	101	489	30	100	503	1,235
1925	14	413	757	83	116	829	2,212
1926	61	331	696	30	217	978	2,313
1927	96	659	1,083	47	301	1,586	3,772

Samples of Sewage.

SEWAGE WORKS.—96 samples from the following purification works :—Bishopbriggs, 1; Hairmyres Colony, 3; and Westthorn, 87; Downiebrae Road Sewer, Rutherglen, 5 samples of silt.

Samples of Trade Effluents.

659 samples were examined from the following sources :—

Effluents.	Samples.
Coal Washers,	504
Pit Water,	29
Paper Mills,	109
Bleach and Print Works,	9
Lead Mines,	3
Oil Works,	1
Ammonia Works,	4

Streams.

1,083 samples were examined, of which 450 were analysed for evidence of sewage pollution, and 633 in connection with trade waste discharge.

Streams affected by Sewage.—River Clyde, 432; Bishopbriggs Burn, 4; Ditch at Hairmyres Colony, 6; Jock's Burn, Carluke, 2; Ditch on Crawfordwalls Farm, Carluke, 2; Car Syke, Baird Syke, Ditch on Allanton Farm, Larkhall, and Ditch at Crawford Hotel, Crawford, 1 sample each.

Streams affected by Trade Effluents.—The following table gives the number of samples, the source of pollution affecting same, and the number of samples of effluent examined:—

Stream.	No. of Samples.	Affected by.	No. of Samples of Effluent.
River Clyde, - - - -	2	Blantyre Ferme Colliery, - - -	25
" " - - - -	2	Broomside Colliery, - - -	9
" " - - - -	—	Carmyle Bleach Works, - - -	1
" " - - - -	—	Ferniegair Colliery, - - -	2
" " - - - -	—	" " Pit Water, - - -	2
" " - - - -	—	North Motherwell Colliery, - - -	6
" " - - - -	—	Bothwell Castle Colliery, - - -	5
and Bothwell Castle Ditch, - - -	3	" " Pit Water, - - -	1
River Clyde, - - - -	—	Parkhead Colliery, - - -	5
and Parkhead Inundation, - - -	2		
River Clyde, - - - -	—	Hamilton Palace Colliery, - - -	4
and Hamilton Palace Ditch, - - -	1		
River Mouse, - - - -	36	Wilsontown Colliery, - - -	17
and Wilsontown Ditch, - - -	4	" " Pit Water, - - -	1
River Almond, - - - -	25	Hassockrigg Colliery, - - -	10
" " - - - -	—	" " Pit Water, - - -	1
" " - - - -	11	Muiracre Colliery, - - -	1
and Curry Burn, - - - -	12	Baton Colliery, - - -	14
North Calder, - - - -	7	Gengowan Print Works, - - -	8
" " - - - -	35	Caldercruix Paper Mills, - - -	67
" " - - - -	32	Moffat Paper Mills, - - -	42
" " - - - -	9	Stepends Colliery, - - -	52
" " - - - -	2	Gartness Colliery, - - -	48
" " - - - -	—	Brownieside Colliery, - - -	13
" " - - - -	—		
and Rosehall Ditch, - - -	2	Rosehall Colliery, - - -	19
South Calder, - - - -	—	Carfin Colliery, - - -	8
" " - - - -	—	" " Pit Water, - - -	4
" " - - - -	—	Jerviston Colliery, - - -	1
" " - - - -	4	Westwood Colliery, - - -	16
and Hill Glen Burn, - - -	22	Westwood Pit Water, - - -	2

Stream.	No. of Samples.	Affected by.	No. of Samples of Effluent.
South Calder, - - -	-	} Kingshill Colliery, - - -	6
and Kingshill Ditch, - - -	8		
Auchter Water, - - -	1	Coltness Iron Works, - - -	—
" " - - -	—	Royal George Colliery, - - -	4
Allanton Burn, - - -	24	Allanton Colliery, - - -	10
Barbauchlaw Burn, - - -	12	{ Dewshill Colliery, - - -	—
" " - - -	13		
" " - - -	1	" Pit Water, - - -	1
and Westrigg Ditch, - - -	—	} Westrigg Colliery, - - -	5
Blind Burn, - - -	1		
Bothlin Burn, - - -	—	Stane Colliery, - - -	6
Brown Burn, - - -	1	Auchengeich Colliery, - - -	9
Butter Burn, - - -	8	Monkland Colliery, - - -	—
Meikle Burn, - - -	19	{ Cadzow Colliery, - - -	18
Cadzow Ditch, - - -	5		
Car Syke - - -	1	" " Pit Water, - - -	1
" " - - -	1	Milnwood Iron Works, - - -	—
and Milnwood Ditch, - - -	27	} Milnwood Colliery, - - -	22
Coal Burn, - - -	15		
" " - - -	1	Dalquhandy Colliery Pit Water, - - -	1
Dalserf Burn, - - -	2	Comac Oil Works, - - -	1
and Broomfield Ditch, - - -	19	{ Broomfield Colliery, - - -	29
Dalserf Burn, - - -	1		
Dalziel Burn, - - -	2	South Longrigg Colliery, - - -	—
Dippool, - - -	5	Excelsior Iron Works, - - -	—
Divoy Burn, - - -	4	{ Woolfords - - -	1
Quarter Burn, - - -	8		
Quarter Ditch, - - -	8	and Pool Mine Drainage, - - -	1
Garrison Burn, - - -	6	} Quarter Colliery, - - -	2
" " - - -	5		
and Brownlie Ditch, - - -	5	Castlehill Colliery, - - -	—
Gateside Burn, - - -	—	} Shawfield Colliery, - - -	9
Glengonnar Water, - - -	2		
Howe Burn, - - -	5	Gateside Colliery, - - -	4
Kennel Burn, - - -	10	Leadhills Mines, - - -	3
Kirk Burn, - - -	2	Barblues Colliery, - - -	4
Light Burn, - - -	—	Douglas West Colliery Pit Water, - - -	1
Lingore Burn, - - -	8	Lochend Colliery, - - -	6
Mill Burn, - - -	14	Dechmont Colliery, - - -	1
" " - - -	—	{ Knowton Colliery, - - -	8
and Cornsilloch Ditch, - - -	11		
Mollin Burn, - - -	12	" Pit Water, - - -	2
and Luggie Water, - - -	5	} Swinhill Colliery, - - -	—
Muir Burn, - - -	13		
" " - - -	2	Cornsilloch Colliery, - - -	11
" " - - -	—	} Bedlay Colliery Pit Water, - - -	4
" " - - -	—		
" " - - -	—	Auchlochan Colliery, - - -	14
" " - - -	—	{ Auchlochan No. 9, - - -	14
" " - - -	—		
" " - - -	—	" " Pit Water, - - -	3

Stream.	No. of Samples.	Affected by.	No. of Samples of Effluent.
Myers Burn, - - - - -	1	Uddingston Gas Works, - - - - -	—
Newton Burn, - - - - -	1	Newton Colliery, - - - - -	12
Park Burn, - - - - -	2	Blantyre No. 1, - - - - -	4
„ „ - - - - -	2	Greenfield Colliery, - - - - -	2
Pow Burn, - - - - -	1	Viewpark Colliery, - - - - -	10
„ „ - - - - -	2	„ „ Pit Water, - - - - -	1
Ravel Burn, - - - - -	12	Bothwell Park Colliery, - - - - -	5
„ „ - - - - -	4	„ „ Pit Water, - - - - -	2
Bredisholm Colliery, - - - - -	—		
„ „ - - - - -	4	Tannochside Colliery, - - - - -	3
Rumbling Syke, - - - - -	2	Excelsior Iron Works, - - - - -	—
Shirrel Burn, - - - - -	8	Mossend Iron Works, - - - - -	3
„ „ - - - - -	4	Holytown Colliery, - - - - -	2
and Holytown Ditch, - - - - -	6		
Shotts Burn, - - - - -	40	Hirst Colliery, - - - - -	24
and Hirst Ditch, - - - - -	3		
Swinstie Burn, - - - - -	2	Howmuir Colliery, - - - - -	1
Spittal Burn, - - - - -	1	Bardykes Colliery, - - - - -	—
Todhole Burn, - - - - -	1	Coursington Colliery, - - - - -	—
Whinney Burn, - - - - -	4	Excelsior Iron Works, - - - - -	—
Dykehead Ditch, - - - - -	6	Bog Colliery, - - - - -	—
and Bog Inundation, - - - - -	1		
Hattonrigg Ditch, - - - - -	11	Dykehead Colliery, - - - - -	3
East Parkhead Ditch, - - - - -	1	Hattonrigg Colliery, - - - - -	2
Thankerton Ditch, - - - - -	11	East Parkhead Colliery, - - - - -	—
Woodhall Ditch, - - - - -	8	Thankerton Colliery, - - - - -	—
Ross Inundation, - - - - -	1	Woodhall Colliery, - - - - -	—
		Ross Colliery, - - - - -	—

Water Supplies.

47 samples of water were analysed, 30 being from public supplies and 17 from private sources.

The *public supplies* examined were:—Carluke supply, 13; Forth supply, 10; Pettinain supply, 3; Carnwath supply, 2; Carstairs supply, 1; and Middle Ward supply, 1.

The *private supplies* examined were:—Cranley, Carstairs, 2; Hazeldene, Stonehouse, 2; Over Tweedieside, Stonehouse; Hillhead, Covington; Roughazie, Avondale; Harthill Mains, Harthills; Stane-bent, Shotts; Kittymuir, Stonehouse; Torrance Lodge, East Kilbride; Rosemount, Newmains; Headhouse, East Kilbride; Darroch's House, Philipshill; Broadfield, Symington; Carmacoup, Douglas; and Sunny-side, Newmains, 1 sample each.

Food and Drugs.

1,586 samples were examined, consisting of the following :—

	No. Examined.	No. not Genuine.
Sweet Milk,	1073*	46
Cream,	1	—
Skimmed Milk,	13	—
Butter Milk,	1	—
Butter,	5	1
Sugar,	31	—
Wine,	1	—
Whisky,	52	—
Sauce,	8	—
Sausages,	13	—
Sausage Meat,	11	—
Mince,	286	160
Chilled Meat,	4	—
Apples,	3	—
Corn Flour,	5	—
Meat Extract,	1	—
Ham,	62	1
Seidlitz Powder,	4	1
Barley,	2	—
Brose Meal,	7	—
Gregory Powder,	1	—
Cherries Glace,	1	—
Rennet,	1	—

* Includes 126 samples from individual cows, of which 15 were deficient in Fat and 17 in Solids not Fat.

Milk of Hygienic Quality.

287 samples of milk were examined, consisting of the following grades :—

Certified,	123
Grade A. (T. T.),	129
Grade A.,	18
Pasteurised,	17

12 of these samples did not contain the requisite amount of butter fat.

Special Samples.

14 samples were examined, consisting of :—Boric acid, 6 samples ; lysol, 5 samples ; wall plaster, 2 samples ; and cement, 1 sample.

Rivers Pollution Prevention.

SENIOR INSPECTOR,

FRANK M'ARTHUR.

The work done during the year by the staff of three Inspectors is summarised in the following table:—

SOURCES OF POLLUTION.—INSPECTIONS AND POLLUTIONS DETECTED.

Nature.	SOURCES LIABLE TO POLLUTE.				POLLUTIONS DETECTED.	
	Number.	Number Inspected.	Number of Inspections.	*Samples Taken.	Number of Sources.	Number Detected.
Coal-Dross Washers, -	75	75	899	521	40	166
Lead Washer, - -	1	1	1	3	1	1
Ammonia Works, -	19	8	56	7	1	3
Paper Mills, - -	2	2	76	109	2	70
Print, Dye Works, &c.,	4	2	12	9	1	1
Chemical Work, - -	1	—	—	—	—	—
Sewage Works and Outfalls,	102	87	460	103	10	61†
Streams, &c., - -	—	163	2,320	1,098	—	—
TOTAL, - - -	—	338	3,824	1,850	55	302

* The samples analysed are dealt with in the Report of the work done in the Chemical Laboratory.

† Only one pollution is recorded against Westthorn Sewage Works, but the discharge of crude sewage was continuous throughout the year.

Trade Pollutions.

The total mining and manufacturing pollutions detected amounted to 241. Of these, 166 were from coal-dross washers, and the remaining 75 from the lead washer, ammonia works, paper mills, and print and dye works, which directly discharge their effluents to streams.

COAL-DROSS WASHERS. — There are 75 coal-dross washers on the register. 899 inspections were made, 521 samples taken, and 166 pollutions, involving 40 collieries, detected.

The washer at Cornsilloch Colliery, which had not been in operation since 1911, and a new washer at Muiracre Colliery, near Shotts, and on the Almond Watershed, were brought into operation during the year, as was also a new washer, to replace the existing one at Hassock-rigg Colliery. The washer constructed in 1925-26 at Muirhead Colliery, West Benhar, had not been brought into operation at the close of the year.

Production ceased at Coursington (Burgh of Motherwell); Forrestburn, Shotts; and Howmuir, Cleland, collieries, the washers in each case being dismantled. The washer at Eddlewood Colliery was also dismantled. Jerviston Colliery closed down, the washer being sold. It is still standing, but is not in operation. Coal washing also ceased at Swinhill Colliery, the dross being now washed at Cornsilloch Colliery in the same ownership. The washer is still in existence, however.

The numbers of inspections made and pollutions detected were much larger than in the previous year, when the collieries were inoperative for six months owing to the coal dispute.

Pollutions were detected at the following collieries:—

Allanton.	Gateside.
Auchengeich.	Hamilton Palace.
Auchlochan.	*Hassockrigg.
Auchlochan No. 9.	Hattonrig.
Barblues.	*Hirstrigg.
*Baton.	*Holytown.
*Blantyferme.	Kingshill.
Bothwell Castle.	*Knowton.
Bothwellpark.	Lochend.
Bredisholm.	*Milnwood.
Broomfield.	Newton.
Broomsides.	Parkhead.
Brownieside.	Quarter.
Cadzow.	Rosehall.
Cornsilloch.	*Stepends.
Dalquhandy.	Thankerton.
Dewshill.	Viewpark.
Douglas Castle.	Westrigg.
Dykehead.	*Westwood.
*Gartness.	*Wilsontown.

* Specially reported to the County Clerk.

With regard to the collieries at which serious pollution occurred, and on which special reports were forwarded to the County Clerk, the following notes might be made:—

Baton Colliery, Shotts.—Numerous inspections were made at this colliery in the latter part of the year, when the ground settling area was found to be silted up, and the effluent therefrom unsatisfactory, pollution being observed on seven occasions during October, November,

and December. On 17th November evidence of serious pollution was also noted, said to have been due to the contents of the silt-recovery tank having been run off to the settling area when there had been a breakdown in the washer. As no effective measures were being taken to put the settling area into a satisfactory condition, reports were forwarded to the County Clerk on 8th October, 18th November, and 27th December, and promises were given by the owners in reply to the County Clerk's communications that satisfactory measures would be taken to remove cause for complaint.

Blantyrefeme Colliery, Uddingston.—This colliery was, as in previous years, the source of very serious intermittent pollution of the River Clyde. During August and September pollution was detected on six occasions, on one of which serious pollution was due to the wilful discharge of washings from the silt-recovery tank direct to the River Clyde. These washings are collected in a large pond, from which they should have been pumped to the bing settling pond for purification. For some time previously there was a suspicion that serious pollution in such circumstances occurred, and recourse to special measures was taken for its detection. As a result, at an inspection made on a Saturday afternoon, a workman was found deliberately opening up an outlet from the collecting pond referred to, through which the large volume of washings in the pond was being discharged to the river. After formal complaint, measures were taken which it was considered would make the occurrence of direct pollution of the nature described a remote possibility. In September serious pollution was again detected, not to direct discharges, but to the unsatisfactory nature of the effluent from the bing settling pond, to which it was believed the washings were being regularly pumped, and which was formed of unsuitable open debris. After further pressure on the management with regard to this defect, a start was made to face the inside of the pond with fine material, and a temporary pond formed to intercept the bing filtrate and clarify it before it passed to the River Clyde. These measures removed cause for further serious complaint up to the end of September. On 21st October, however, it was found that the outlet manhole from the collecting pond was again in such a condition as to allow of the washings being discharged direct to the river. Strong verbal complaint was therefore at once made to the colliery management, as a result of which the outlet was filled in, but at a later inspection (21st November) conditions were observed

at the outfall to the river which created a suspicion of further serious direct pollution, and, as it did not appear that such pollution had been due to the opening up of the collecting pond outlet as previously, it occurred to the inspector that a connection to the outfall pipe at some point between the silt-recovery tank and the collecting pond might have been made. No evidence of this could be found, however. With regard to the pollutions actually detected during October, November, and December, these related to slight surface drainage pollution; to slight pollution from the pond at the base of the bing settling pond; and to more serious pollution on two occasions, when it was found that part of the turf bank of this settling pond had been deliberately removed. With regard to the facing or lining of the inside of the bing settling pond with fine material, this work was found to be completed towards the end of November, so that ample means for satisfactorily disposing of the washings was then available. In the past, however, every possible means or opportunity seems to have been taken to evade the responsibility of preventing pollution, and it is by no means certain that there will be no further cause for serious complaint.

Gartness Colliery, Moffat Mills. — Serious pollution occurred at this colliery on several occasions during the year due to the defective condition of the bank of the settling area. There was also more or less continuous slight pollution from surface drainage for which there are no remedial measures. The unsatisfactory conditions not having been properly remedied, the matter was reported to the County Clerk. At inspections made during October it was found that, while efforts had been made to repair the bank of the settling area, the effluent was polluting, as the material used for the purpose was too open in character. Later in the same month serious pollution was again occurring, due to a further break. On 11th November improvement was found to have been effected by dividing the settling area into three ponds, most of the suspended matter settling in the first of these ponds. These remedial measures proved fairly satisfactory.

Hassockrigg Colliery, near Shotts. — A new washer to replace the existing one was brought into operation in the beginning of February. On 31st January, when pollution was observed, attention was drawn to the fact that the settling ponds would soon require to be cleaned out. A temporary remedy was effected. During April, May, and June, however, pollution was detected on five occasions, the Almond,

on 27th June, being observed to be grossly polluted. This condition was due to the fact that the settling ponds were silted up, and had been more or less in that condition during June and the two preceding months. Repeated verbal complaint having failed to bring about a satisfactory remedy, the circumstances were twice reported to the County Clerk. The owners of the colliery, in reply to a second communication from the County Clerk, explained that, owing to exceptionally wet weather, there had been difficulty in having the ponds properly cleaned out.

Hirstrigg Colliery, Salsburgh.—Several further complaints were made by the Airdrie and Coatbridge Water Board, alleging pollution by discharges from this colliery of the Shotts Burn, which is a feeder of the Board's Roughrigg reservoir. One of these complaints was made in April, and at an inspection made on 29th April it was found that pollution was occurring on account of a pump, which discharges the washings to a pond on the bing, having broken down, and the effluent flowing to small ponds on the ground surface, from which the discharge was polluting. A new pump, which had previously been arranged for, was installed, an additional small ground-surface pond constructed, and better attention paid to these settling ponds. Complaints were again made in June, however, consequent on which several inspections were made, the place being specially visited by the County Medical Officer on 9th June, when the preventive measures were found in satisfactory condition and no pollution occurring. A further complaint was made on 30th September. An immediate inspection was made and a series of samples taken, which showed that there was ground for complaint, the preventive measures being in very unsatisfactory order. Thus, the washings were not being pumped to the small ponds on the colliery bing, the settling ponds were either silted up or defective, and the effluent as discharging to the outfall ditch was of a seriously polluting nature. A detailed report of the circumstances was forwarded to the County Clerk, who communicated with the owners of the colliery. On 13th October slight pollution was occurring, probably during the cleaning out of one of the settling ponds. After the complaint of the Manager of the Airdrie and Coatbridge Water Board made on 30th September, above referred to, improvements were carried out by repairing a break in one of the ground-surface settling ponds, cleaning out the bing settling pond, and resuming pumping of the washings to the bing pond. On 20th

October, however, a further complaint of pollution was received, alleging that on that day the water of the Shotts Burn had been discoloured along its whole course, down to and as entering the Water Board's reservoir. The bed of the stream inside the tunnel at the reservoir was also alleged to be covered with black silt, suggesting "a large volume of pollution . . . over a considerable period." On the same day an inspection was made by the County Medical Officer, who found no pollution occurring at the time of inspection and no evidence of recent pollution. Thereafter, following on correspondence with regard to the complaint made on 30th September, a meeting was held at the colliery on 3rd November, which was attended by the County Medical Officer, the Manager of the Water Board, a Director of the Colliery Company, and others. At this meeting further improvements made or contemplated were pointed out. These comprised a new pond on the bing, with the necessary piping, and a new ground settling area. These measures, provided they are maintained in good order, were considered to be satisfactory. No further complaint was received during the year.

Holytown Colliery.—Pollution detected at this colliery on 16th December occurred late in the afternoon after washing operations had ceased for the day, and was due to a seriously polluting overflow from the silt-recovery tank, occasioned by failure to have the surplus washings pumped to the settling area. Verbal complaint was made to the local colliery officials, but, as there was evidence of previous pollution in the outfall ditch which might have occurred in similar circumstances, a report was forwarded to the County Clerk, who wrote to the owners on the matter.

Knowton Colliery, near Shotts.—Serious pollution was observed on 14th November, due to the ground-surface settling area in use being silted up to the level of the outlet. Evidence of previous gross pollution was also observed. A report was forwarded to the County Clerk, who complained to the owners. Improvement was effected by banking up the settling area and raising the outlet sluice. A new bing settling pond was in course of formation during the year.

Milnwood Colliery, Bellshill.—This colliery, which in previous years was a source of serious pollution of a tributary of the South Calder Water and also of that stream, had again to be seriously complained of in the latter part of the year. Earlier, in June,

pollution of short duration was caused by the washings flowing to the outfall ditch without first passing through the settling areas. This was ascertained to be due to an open channel conveying the washings to the settling areas having become choked up by debris from the refuse bing. A new channel was being cut at the time of inspection, and, on attention being drawn to the serious pollution which was occurring, the work was at once completed. From that time until about the end of the year the effluent was perfectly satisfactory, except at inspections made during the month of September, when twice the bank of one of the settling areas was found to require building up at the point of overflow. On another occasion in September pollution was due to the bank of the same settling area having given way. These defects were at once remedied on attention being drawn to them. There was a recurrence of serious pollution, however, in November and December, when pollution was detected on no fewer than eight occasions, due, except on two occasions, either to the defective condition of the banks of the settling areas or to the silted-up condition of these areas. The two exceptions were on 25th and 26th November, when the washings were discharging direct to the outfall ditch without passing through the settling areas, on account of a portion of a channel which conveys the washings from the washer having given way. Means were at once taken to remedy this defect, but in view of the general unsatisfactory condition of the preventive measures, which had resulted in periods of continuous pollution, reports of inspections made from 10th June to 9th January of the current year were forwarded to the County Clerk, who twice took the matter up in writing with the colliery owners.

Stepends Colliery, Plains.—This colliery continued to give considerable trouble on account of the settling ponds being either defective or silted up, and its record since coal washing commenced in 1923 has been extremely unsatisfactory, so much so that the Public Health Committee have twice given serious consideration to the question of taking legal proceedings against the owners. In January the County Clerk complained to the owners, as a result of which the settling ponds were cleaned out. Pollution was reported in March, due to defects in the ponds, and in April and May the settling ponds were again found to be in an unsatisfactory condition, as a result of which the North Calder Water was polluted. Thus, on 6th April, there was serious pollution, due to one of the ponds being almost fully silted up, and

to polluting drainage from another pond, which was being prepared for cleaning, passing to the stream. On 22nd April and 5th May both ponds were found to be silted up. As a result of verbal complaint made to the local management, some silt was removed from one of the settling ponds, and a third small settling pond partially formed, but as these measures were quite inadequate to remove cause for complaint, another report was forwarded to the County Clerk, who again communicated with the owners. As a result of this action, one of the large settling ponds was cleaned out, and at the same time sub-divided so as to form two ponds. This was being done at a special inspection made by the County Medical Officer on 19th May, and improved matters, but merely for the time being. Thus, on 12th July, it was found that the outlet from the settling pond required to be raised, as the effluent was polluting, and on four occasions during August and September the settling ponds were found to be silted up, pollution noted on 26th August being of a very serious nature. In view of these circumstances, a further report was forwarded to the County Clerk. Prior to this the colliery officials promised that a new clay and turf retaining bank would be built. This improvement was duly carried out, but pollution again occurred on account of the outfall pipe requiring to be raised. The preventive measures continued to be very unsatisfactory, pollution being observed on eight occasions during October, November, and December, and reports, embracing inspections made from 1st September to 16th December, were forwarded to the County Clerk. On 23rd December serious pollution was occurring, due to a portion of the bank of one of the settling ponds having given way. A detailed report of the inspection then made was also forwarded to the County Clerk.

Westwood Colliery, near Newmains.—On 10th January the contents of the washer tanks were found being run off direct to the Hill Glen Burn, causing serious pollution, there being no means of dealing with a discharge of this nature, although the owners had been pressed for a long time to provide such means. This was ultimately done. Serious pollution of the same stream and its main stream, the South Calder Water, was also observed on 14th and 15th April, when it was learned that overflow washings from the silt-recovery tank were being conveyed by an old pit-water drain direct to the Hill Glen Burn. A report of these circumstances was forwarded to the County Clerk, who complained to the owners. Steps were taken to close up the drain referred

to. Slight surface drainage pollution was observed in September, and pollution detected on 28th December was due to a settling pond being silted up. It was partially cleaned out, and the construction of a new pond proceeded with.

Wilsontown Colliery, Wilsontown.—Two complaints alleging pollution of the Mouse Water by coal-dross washings from this colliery were received by the County Clerk from farmers whose lands are traversed by that stream, and affords a water supply for their stock. One of these was made on behalf of a number of farmers in addition to the writer of the complaint. It was suggested that it was usually during a spate or heavy rain that pollution was most serious, an offensive deposit being left on the banks of the stream. Inquiries and inspections were made. On 5th May, shortly before receipt of the complaints, slight pollution was found to be occurring, due to the outlet sluice of a settling pond being too low. Similar conditions were found on 19th May, when the complaints were specially inquired into, but beyond that there seemed no reason to complain of the condition of the preventive measures, although the complainers stated that pollution had been observed several times during the month of April, and some possible evidence of this was observed in the form of old silt deposits high up on the banks of the stream. A report was forwarded to the County Clerk. Subsequent inspections were made on 24th May and 15th June. At the former it was found that an old bing pond had been banked up and brought into use, but at the latter inspection evidence of recent pollution was observed, which the Manager stated had been caused by the bank of the settling area having given way. Repairs were at once made, however. At this inspection also the coke-quenching water was found to be of a slightly polluting nature, but this condition was of very short duration. Pollution was also observed on 17th October, due to the sluice of the settling pond having been drawn, and part of the washings discharged to the outfall ditch in an unpurified condition. The attention of the Manager was directed to the cause of pollution. At an inspection made three days later, however, the sluice was again found to have been drawn, the settling pond quite empty, and evidence of pollution in the outfall ditch. A further complaint was therefore made to the Manager, who promised to take action to prevent recurrence of pollution in similar circumstances. There was no further cause for serious complaint.

In addition to the foregoing collieries, there were several other collieries where there was cause for serious complaint under circumstances which are worthy of note, but where remedial measures were effected without it being necessary to forward special reports to the County Clerk. The more important of these are referred to below.

Broomside Colliery, Motherwell.—On 9th June pollution was detected in the course of an inspection following a complaint of intermittent pollution, which was stated to occur several times during the week, usually after six o'clock in the evening. At this inspection it was found that pit water in large volume was being discharged into a small settling pond which intercepts any overflow from a collecting sump, and over which a box arrangement for measuring the flow of pit water had been placed some time previously. As a result of the pit water falling from this box into the settling pond with considerable force, the contents of the pond were washed out, causing pollution. Instructions were given by the Manager for the removal of the box and the diverting of the pit water out of the pond.

Cornsillock Colliery, near Larkhall.—The washer at this colliery was restarted at the end of June, not having been in operation since 1911. Inspections were made prior to the commencement of washing in order to ensure that adequate measures were to be taken for the prevention of pollution. These measures consist of a big settling pond, to which the washings from the silt-recovery tank and other surface drainage and washings from the washer are conveyed. Shortly after the washer was brought into operation it was learned that the bank of the settling pond had given way, causing serious pollution of the Mill Burn, evidence of which was observed at an inspection made on 3rd August. This break in the bank of the pond was satisfactorily repaired. Subsequently, on numerous occasions, slight pollutions were observed, believed to be due to a certain amount of surface drainage, &c., apart from that which is intercepted and conveyed to the settling pond, gaining access to one of the pit water outfalls. Additional means for dealing with these sources of pollution were considered, but had not been carried out at the close of the year.

Dykehead Colliery, near Larkhall.—Pollution observed at this colliery in August occurred as a result of the chokage of a deep outfall drain which is common to both Dykehead and Bog Collieries, and which discharges to an extensive inundation adjacent to the River Clyde.

As a result of this chokage the washings from Dykehead Colliery were diverted to a small, normally clear, stream on Low Merryton Farm, which is a source of water supply for cattle. The effluent from Bog Colliery did not effect this stream. Remedial measures were at once taken, on complaint being made, by banking up the settling area at Dykehead Colliery, these measures being satisfactory until the defective outfall drain referred to was made good, and the washings from both collieries discharged as formerly to the inundation.

Rosehall Colliery, Bellshill.—On 17th February a portion of the side of the bing settling pond gave way during very stormy weather, several thousand tons of washer dirt, of which the bing is formed, being carried on to the colliery railway and adjacent field, and almost wiping out a cottage situated near the bing. As a result, no adequate means were available for disposing of the washings, and there was more or less continuous pollution of the North Calder Water until the 20th May. The work of repair, however, proceeded without interruption from shortly after the break occurred, an average of about 750 tons a week of dirt from the washer being deposited so as to close the breach. After this had been done the washer dirt was still taken to the bing to further strengthen the pond and to form additional ponds.

Viewpark Colliery, Uddingston.—The settling area at this colliery, owing to encroachment of the refuse bing, had been so reduced in extent as to be ineffective as a settling area, and proposals for a new settling area or pond had been under consideration. Owing to the situation of the colliery and the disposition of the refuse bings, this was a matter of some difficulty. The question was solved by the laying of an iron pipe to the refuse bings on the north side of the Edinburgh Road, where a bing settling pond was formed, and to which the coal-washing effluent was discharged. This work was completed in the beginning of September. Towards the end of the year, however, this pipe, which is about 260 yards in length, gave considerable trouble on account of leakages and bursts, but satisfactory repairs were effected. Frequent inspection was necessary during the time the repair work was being carried out.

The decision in the legal proceedings taken against the owners of *Allanton Colliery*, which is quoted in pages 30-31 of the report for the preceding year, was reported to the Public Health Committee, and, being considered unsatisfactory, was also reported to the Scottish Board of Health for their observations. Subsequently the County

Clerk reported to a meeting of the committee, held on 13th July, that it was understood the Board had no desire to express any opinion thereon; and, in view of a legal difficulty as to the time within which the case could be again raised in court, there was no course open to the committee but to take no further action in the matter. On 21st November the effluent discharging from one of the two settling ponds at this colliery was unsatisfactory, due to a floating arm outlet being held level with the silt in the pond, although the pond was capable of being used for some time longer, at least until the cleaning of the duplicate pond was completed. On attention being drawn to the circumstances, it was explained that it was not intended that the floating arm should have been so far depressed, and it was at once raised, when pollution ceased. This was the first pollution of the Allanton Burn observed since 22nd April, 1926, during the time the legal proceedings against the owners were going on.

With regard to the legal proceedings taken against the owners of *Jerviston Colliery* to enforce the provisions of the Rivers Pollution Prevention Acts in the matter of pollution of the South Calder Water, verbal intimation was received on 23rd February that coal-washing operations had been resumed, and a request made that an inspection might be made of new arrangements for the prevention of pollution which had been brought into operation. This was done, but about six weeks afterwards the colliery was again closed down for an indefinite period on account of depression in the coal trade. Mining operations were not again resumed, the whole plant being sold off on 10th and 11th November. The washer was, however, *in situ* at the close of the year.

LEAD WASHER.—The County Medical Officer inspected this source of pollution on 29th November, when the settling ponds were found silted up and the washings discharging to the Glengonnar Water in a polluting state, as noted at inspections made in the preceding year. Samples taken, on analysis, contained the following amounts of suspended solids in parts per 100,000, viz.:—(1) effluent as entering settling ponds—(a) 1048·0; (b) 550·0; effluent as leaving settling ponds 462·0; the Glengonnar Water immediately below the outfall, 200·0; and the Glengonnar Water at Townfoot, 128·0. It was found that motor haulage for use in cleaning out the settling ponds had been provided, which, it was anticipated, would facilitate this work considerably.

AMMONIA WORKS.—The number of inspections made during the year was 56. The only pollutions recorded occurred at Wilsontown Works, where the spent ammoniacal liquor is disposed of in old mine workings. On 7th and 8th February slight pollutions of a ditch which joins the River Mouse was detected, due to a leak in the fire-clay pipe which conveys the liquor to the mine workings. No time was lost in having the pipe repaired. Slight pollution by coke-quenching water was also observed on 15th June, due, it was understood, to disturbance of silt in the process of clearing drains at the coke ovens. Pollution was of short duration. Pollution of the Pow Burn and River Clyde occurs as formerly from Uddingston and Cambuslang Gas Works respectively. Blast furnaces in the County continued to be almost entirely inoperative.

MANUFACTORIES.—The number of inspections made during the year was 76, nearly all of which, as in the previous year, were at Caldercruix and Moffat Paper Mills.

Caldercruix Paper Mills.—The preventive measures at these mills continued, on the whole, to be most unsatisfactory, which is brought out by the analyses of the effluent samples taken during the year, given below. The figures show the amounts of suspended solids in parts per 100,000 contained in the samples. The standard for a paper mill effluent recommended by the Royal Commission on Sewage Disposal is 6 parts per 100,000.

Date of Sampling.	Upper Outfall.	Lower Outfall.
14th January,	—	30·5
20th „	48·1	53·1
4th February,	24·8	55·6
18th „	59·6	56·2
25th „	76·8	55·8
3rd March,	52·8	64·6
8th „	58·2	32·6
17th „	23·4	45·0
24th „	28·6	54·7
31st „	9·0	20·0
6th April,	17·2	31·5
14th „	18·9	220·1
22nd „	27·6	33·6
28th „	16·0	15·6

Date of Sampling.				Upper Outfall.	Lower Outfall.
5th May,	...	...	...	15.0	39.8
13th „	...	...	...	2.6	—
19th „	...	...	...	4.6	5.2
27th „	...	...	...	23.9	—
2nd June,	...	...	...	15.8	15.4
30th „	...	...	...	20.4	8.4
12 July,	...	...	...	17.8	14.1
29th „	...	...	...	12.6	25.4
3rd August,	...	...	...	16.3	20.0
12th „	...	...	...	20.0	14.6
19th „	...	...	...	10.6	19.8
26th „	...	...	...	23.6	4.7
1st September,	...	...	...	8.8	11.2
28th „	...	...	...	16.4	43.4
14th October,	...	...	...	18.0	11.2
20th October,	...	...	...	16.6	21.2
3rd November,	...	...	..	8.6	5.4
23rd „	...	...	...	6.2	13.0
30th „	...	...	...	40.0	11.0
9th December,	...	...	...	20.0	—
16th „	...	...	...	—	21.6
23rd „	...	...	...	2.0	5.6

These results were duly reported to the Public Health Committee, who, at a meeting held on 16th March, appointed a sub-committee to inspect the preventive measures at both Caldercruix and Moffat Paper Mills, and to report. This sub-committee did so on 19th May, along with the officials. At the inspection the settling ponds were found to be in fairly satisfactory condition, the majority of them having been recently cleaned out. The larger of the sludge areas was found to be full of sludge. An overflow on the channel leading from the settling ponds to the sludge pump was pointed out, and the probability of sludge from the ponds being discharged direct to the North Calder by this means was referred to, although the Manager would only admit that supernatant liquid is run off by this overflow. A full report of the inspection is appended to the minute of meeting of the Public Health Committee held on 3rd August, at which the Clerk was instructed to communicate with Messrs. Craig, stating that, in the committee's opinion, renewed efforts should be made to acquire

additional ground for sludge ponds, and that the overflow or opening on the sludge channel above referred to should be built up, and that, further, steps should be taken to ensure that the settling ponds are cleaned out more regularly and systematically. On 28th September both sludge disposal areas were observed to be almost full of sludge.

On 8th December a letter was received from the Manager of the mills with reference to the analyses of samples of effluent, and inquiring as to the standard observed in classifying a sample as satisfactory or otherwise. In reply it was pointed out that the standard taken was that recommended by the Royal Commission on Sewage Disposal, viz., 6 parts per 100,000. In his letter the Manager also stated that in considering means for improving the methods of effluent disposal, the firm were in touch with a number of firms and others who specialise in the settling of effluents and in methods of dealing with sludge. He also pointed out that for two months a contractor had been cleaning out the larger sludge disposal area, and that as soon as this work was completed they would consider dividing this area into two, thus making three areas instead of two, which would make the work of cleaning easier. It was also pointed out that continuing to dispose of sludge by their present method would mean the acquiring of more land, hence the reason for making inquiries as to other methods of sludge disposal which would obviate this.

With regard to the inspections made during the last three months of the year, the work of cleaning the sludge disposal area referred to, and also of banking up the other smaller area with ashes was seen in progress. It was also observed that the sludge contents of the settling ponds were being regularly pumped to the smaller sludge area. It was also found, however, on 3rd November, that there had been a large break (which had been repaired) in the bank of the sludge area being cleaned out, and that a considerable quantity of sludge had entered a small headstream of the North Calder, no doubt causing serious pollution. It was also observed that in the channel leading from the settling ponds to the pump collecting well a sluice had been inserted at the inlet to the well, so that in the event of any of the settling ponds being run off, their contents would pass to the North Calder by the overflow weir in the channel before referred to, which had been complained of from time to time, and it was evident from the condition of the channel that this had actually occurred, when there would be serious pollution.

Moffat Paper Mills.—The preventive measures at these mills continued unsatisfactory, and, in addition, during the month of March the North Calder Water was polluted by a continuous direct discharge of crude effluent from the pipe or carrier which conveys the effluent to the settling ponds. The amounts of suspended solids (parts per 100,000) in the samples of effluent from the settling ponds taken during the year were as follows:—

Date of Sampling.						Suspended Solids.
6th January,	...	...	...	...	...	12·8
13th „	...	...	...	...	...	18·2
21st „	...	...	...	...	...	48·2
4th February,	...	...	...	...	...	17·2
18th „	...	...	...	...	...	7·0
25th „	...	...	...	...	...	31·1
11th March,	...	...	...	...	...	12·2
17th „	...	...	...	...	...	17·2
24th „	...	...	...	...	...	69·0
31st „	...	...	...	...	...	23·5
6th April,	...	...	...	...	...	25·7
22nd „	...	...	...	...	...	17·1
28th „	...	...	...	...	...	4·4
5th May,	...	...	...	...	...	20·0
11th „	...	...	...	...	...	23·9
19th „	...	...	...	...	...	31·6
27th „	...	...	...	...	...	20·2
2nd June,	...	...	...	...	...	8·4
30th „	...	...	...	...	...	12·1
12th July,	...	...	...	...	...	19·2
29th „	...	...	...	...	...	7·9
3rd August,	...	...	...	...	...	16·6
19th „	...	...	...	...	...	20·6
1st September,	...	...	...	...	...	24·1
12th „	...	...	...	...	...	22·9
23rd „	...	...	...	...	...	22·6
4th October,	...	...	...	...	...	48·9
14th „	...	...	...	...	...	50·6
27th „	...	...	...	...	...	27·6
11th November,	...	...	...	...	...	17·0
17th „	...	...	...	...	...	17·4
23rd „	...	...	...	...	...	23·0
30th „	...	...	...	...	...	45·0
9th December,	...	...	...	...	...	14·0
16th „	...	...	...	...	...	24·0

The sub-committee appointed to inspect and report with regard to Caldercruix and Moffat Paper Mills also visited Moffat with the officials on 19th May, when the neglect to regularly clean out and make proper use of the settling ponds was explained, as was also the fact that, as the sludge pond was almost completely filled, a new place of disposal was required. The Public Health Committee, therefore, instructed Messrs. Craig to be written to, suggesting that they should now take steps to secure ground for a new sludge pond, and that, further, as in the case of Caldercruix Mills, steps should be taken to ensure that the settling ponds are regularly and systematically cleaned out. At the inspections made in the following few months it was noted that nothing had been done in the way of providing a new sludge disposal area or other means of sludge disposal, and there was also reason to think that the settling ponds were not being properly cleaned out. On several occasions many of them were found to be fully silted up. During the latter part of the year, however, workmen were found heightening the banks of the sludge area with ashes, but the settling ponds were still found to be in an unsatisfactory condition, all or most of them being silted up. In the letter of 8th December, from Messrs. Craigs' Manager, with regard to Caldercruix Mills, reference is made to the work of raising the bank of the sludge area at Moffat Mills, and the statement is made that in view of the increased capacity of the area thus provided, which would deal with the sludge for some time to come, it would be possible to clean the settling ponds regularly and at more frequent intervals, but that, as the disposal of the effluent at Caldercruix Mills was the bigger problem, the investigations proceeding concerned these mills in the first instance. Any improved methods of effluent disposal adopted there would, however, be applied to Moffat Mills in due course.

Carmyle Bleach Works.—The effluent discharged from these works to the River Clyde is of a whitish, soapy, nature, and is a source of slight intermittent local pollution. A sample was taken for analysis.

Glengowan Print Works.—There is nothing of special interest to record with regard to these works. The effluent is as a rule highly coloured, and in that respect considerably affects the appearance of the North Calder Water. The amount of suspended solids is usually not excessive, however. Several effluent and stream samples were taken for analysis during the year.

Comac Oil Works, Coalburn.—These works, constructed in 1926, and situated within the watershed of the Coal Burn, comprise a small plant for the low temperature carbonisation of coal for the production, meantime, of oil and smokeless fuel. The residual effluent is of a polluting nature, and it was found that no means had been taken to satisfactorily dispose of it. On attention being directed to these circumstances, however, arrangements were made to divert the effluent to old colliery workings, which was done towards the end of January, with satisfactory results.

Excelsior Iron Works, near Wishaw.—In view of a complaint received in the month of February as to serious pollution of the Whinney Burn as flowing through Dalzell Estate, inquiries were made, when it was found that a pickling bath at these works had been run off on the day of complaint, causing the stream to be seriously discoloured, and its bed to be coated with red iron matter. A pond which receives this effluent was cleaned out after complaint of pollution was made.

Solid Matter Pollution.

No instances of serious pollution or obstruction of streams by solid matter, which could be dealt with under Section 2 of the Rivers Pollution Prevention Act, 1876, were reported during the year.

Sewage Pollution and Sewage Disposal.

In connection with sewage pollutions, 460 inspections were made of sewage purification works and sewage outfalls, and 103 samples taken.

Unsatisfactory conditions, resulting in pollution, in most instances of a temporary nature, were detected at the undernoted sewage purification works.

Purification Works.	Dates of Inspection.	Notes of Inspections.
Bellshill Hospital.	<div> <div> 25th May, 26th May, 6th June, 13th-16th June, 20th June, 27th June, </div> </div>	Sewage discharging crude to Shirrel Burn whilst septic tank under repair.
Birdsfield.	<div> <div>3rd February, 7th February, 14th February, 22nd March,</div> </div>	Works in very bad order and effluent polluting.

Purification Works.	Dates of Inspection.	Notes of Inspection.
Bishopbriggs.	12th January,	Discharge of crude sewage by storm overflow, and filtrate from one of the sludge beds unsatisfactory.
	4th March,	Discharge of crude sewage by storm overflow.
	20th April,	
	27th July,	Discharge of crude sewage by storm overflow, and effluent from works otherwise unsatisfactory.
	8th August,	
	10th October,	
	13th October,	
	14th November,	
	28th November,	
Carbarns (Wishaw).	21st February,	Crude sewage discharging direct to River Clyde.
	23rd March,	
	7th April,	
	8th April,	
	13th July,	
	5th August,	
	7th October,	
	9th November,	
	30th November,	
Carluke.	3rd May,	Tank effluent discharging to Jock's Burn without irrigation.
East Kilbride.	17th January,	Small flow of tank effluent to Kittoch Water.
	9th May,	Kittoch Water polluted during cleaning of effluent channel.
Hairmyres Colony.	7th June,	Effluent unsatisfactory.
Harthill.	29th March,	Sewage effluent discharging to How Burn without irrigation.
Stepps.	19th October,	Overflow of crude sewage to Garnkirk Burn.
	26th October,	Overflow of tank effluent to Garnkirk Burn.
	8th November,	
	12th November,	
	28th December,	
Westthorn, Tollcross.	During whole of year.	Part of crude sewage discharging direct to River Clyde.

Further reference is made to the more serious of these pollutions in the following paragraphs:—

SPECIAL DRAINAGE DISTRICTS.—Barony.—The conversion of Westthorn Sewage Purification Works to the activated-sludge (air diffusion) method of purification has been completed. The works are not yet, however, treating the whole of even the dry-weather flow of sewage, and there was, as formerly, a continuous discharge of crude sewage to the River Clyde. A large number of samples of effluent was taken for analysis, the results of which were transmitted to the District Engineer for his guidance.

Bishopbriggs and Auchinairn.—As mentioned in the report for the preceding year, pollution of the Bishopbriggs Burn continued on account of the fact that the whole of the sewage flow, being in excess of what was anticipated, is not being treated. The treated effluent was also frequently found to be unsatisfactory, due to sludge escaping with the effluent to the burn. The filtrate from the sludge beds has also been noted to be a source of pollution.

In view of the continued pollution of the Bishopbriggs Burn by discharges of crude sewage, and the intermittently polluting condition of the treated effluent, a special inspection was made by the County Medical Officer on 13th October, and a communication subsequently sent to the Lower Ward Authorities and to their engineers, drawing attention to these unsatisfactory conditions. This communication was considered by the Lower Ward Public Health Committee, who also had a report from the engineers to the effect that they were satisfied that the unsatisfactory nature of the effluent was due to the stoppage of the agitators during the night, a practice which had been adopted to economise by doing without a third attendant, and that they had under consideration with the makers of the plant a scheme for running the agitators at half speed during the night and early morning, which could be effected without additional assistance. The cost of the necessary plant for this purpose was estimated to be about £40, and the matter was remitted to the local Drainage Sub-Committee to deal with.

East Kilbride.—Reference is made in preceding reports to the unsatisfactory condition of East Kilbride sewage purification works, and to the complaints made as to pollution of the Kittoch Water giving rise to alleged nuisance conditions. As a remedy, a new tank was

provided, and the filters put into proper working order, which removed cause for complaint. Slight temporary pollution was twice noted during the year, due on one occasion to a discharge of tank effluent to the stream, and on the other to a polluting discharge during the time the effluent channel was being cleaned, the sumps in this channel being insufficient to intercept the whole of the suspended matter in the effluent.

Stepps.—At an inspection of Stepps Sewage Purification Works made on 19th October pollution of the Garnkirk Burn by a discharge of crude sewage was observed. The cleaning of the septic tanks and grit chambers had just previously been completed, and the Dortmund tank was being cleaned at the time of inspection, the discharge of crude sewage being occasioned by the fact that there are no means of by-passing the sewage from this tank to the septic tanks when the operation of cleaning is being carried out. Discharges of tank effluent to the Garnkirk Burn from these works have also from time to time been observed, and are understood to be due to the fact that the filters are incapable of dealing with the whole of the tank effluent. It is also believed that intermittent crude sewage pollution occurs at the weekly cleaning of the grit chambers, which are not constructed so that they can be used alternately. These works were extended and improved in 1925 at a cost of well over £1,000.

Stonehouse.—The new sewage purification works on the Cander Water were brought into operation during the month of September. These works consist of two tanks and seven percolating filters, and are of a very complete description.

Populous Places, &c., Outwith Special Drainage Districts.

Bellshill Hospital.—Pollution of the Shirrel Burn by crude sewage occurred in May and June during the time the septic tank, which had been leaking, was under repair.

Birdsfield Estate, Blantyre.—The continued unsatisfactory conditions at these works was again reported to the Public Health Committee, who agreed to give their owner another month in which to remove cause for complaint. Afterwards the estate agents wrote to the County Clerk to say that arrangements had been made with the Town Council of Hamilton for them to take the drainage from the properties within the burgh draining to the sewage works into the

burgh sewer. This arrangement satisfactorily disposes of the bulk of the sewage, and for the properties on the High Blantyre Road in the County area a small septic tank has been provided. A long-standing source of pollution and nuisance is thus removed.

Glenmavis.—Sewage purification works, consisting of a tank and filter, have been constructed for the housing scheme at Glenmavis.

Hairmyres Colony.—Samples taken in June above and below the outfall from the sewage purification works showed, on analysis, that the watercourse below the outfall was polluted. A report was forwarded to the Colony Superintendent, and, in August, shortly after the tank had been cleaned out and the filter distributor overhauled, average samples of sewage and effluents, as well as stream samples, were taken for analysis. The results of analysis on this occasion were satisfactory.

Harthill.—As previously noted, the arrangements for disposal of the sewage of Harthill are most unsatisfactory, particularly at the largest outfall, that at the east end of the village. At this outfall they consist of a small tank and an area of ground for irrigation, and, when specially inspected on 29th March, the sewage, after passing through the tank, was found to be flowing direct to the How Burn, without irrigation, and causing pollution. Further reference to Harthill drainage is made below in the paragraphs referring to drainage facilities for areas outwith special drainage districts.

Overtown.—The construction of sewage purification works for the extensive housing scheme and some other properties at Overtown was completed, the works being brought into operation in March. They provide for complete purification, and comprise two septic tanks and five continuous filters, with the usual detritus chambers, &c., and sludge beds. The outfall is into a ditch which discharges into the River Clyde a short distance north of Garrion Bridge.

Roadmeetings Hospital, Carluke.—A complaint alleging pollution of a stream on Crawfordwalls Farm by effluent from the sewage purification works at this hospital was received. After inspection by the Hospital Sub-Committee and officials, and careful consideration of the complaint, the sub-committee agreed to recommend that, having regard to the heavy demand which would be made on the sewage purification works (which comprise a septic tank and ground for irrigation), when the new hospital is fully occupied and the atten-

tion which would be necessary to have these arrangements maintained in satisfactory order, the present method of disposal be discarded, and arrangements made for taking the hospital drainage into the sewers of Carluke Special Drainage District. This proposal was agreed to.

Drainage Facilities for Areas outwith Special Drainage Districts.—District of the Middle Ward.—The Special Districts Committee have for some years had this question under serious consideration, and in connection therewith inspected the areas which had been reported on, first by the Medical Officer of Health as to the areas requiring these facilities, and, second, by the District Engineer, as to the cost of providing drainage and sewage disposal works. The committee kept in view existing rivers pollution conditions, and also the probable effect of the interception and concentration of sewage outfalls at places where schemes of drainage might be carried out. The inspections were made on 29th March and 12th April, the following places being visited on the former date, viz. :—

Bothwellpark.	Plains.
Bargeddie, &c., Swinton and Easterhouse.	Caldercruix and Glengowan.
Glenboig.	Harthill and Eastfield.
Glenmavis.	Salsburgh.
Greengairs.	Waterloo.
Calderbank.	Overtown.

and on the latter date :—

Auchintibber.	Birkenshaw.
Meikle Earnock.	Ferniegair.
Quarter.	Newarthill.
Chapelton.	Bellside, &c., Cleland, Chapel, and Morningside.
Glasford.	
Ashgill.	

The committee also inspected the new activated-sludge purification works at Bishopbriggs and at Westthorn on 21st April, and the new works at Overtown on 29th March. Thereafter it was agreed, after full consideration—(a) that, as a temporary expedient towards improving the existing conditions in certain of the areas under consideration, authority be given to the District Sanitary Inspector to engage such temporary assistance as might be found necessary from time to time for the cleaning out of ditches into which sewage is discharged; (b)

that a modified scheme of drainage, including sewage purification works on activated-sludge principles, for the village of Glenboig and Garnqueen, which had been under consideration by a joint-committee of Middle and Lower Ward representatives, at an estimated cost of £20,048, should be undertaken, and the area formed into a special drainage district; and (c) that, in view of the urgent need for proper drainage facilities for Harthill and Eastfield, the District Engineer be authorised to prepare plans and obtain estimates for the provision of outfall sewers and sewage purification works, for submission to the committee. With regard to the instructions given to the District Sanitary Inspector as to the cleaning out of sewage-polluted ditches, ditches at the following places were dealt with, most of which were seen by the members of the Special Districts Committee at their inspections:—Ashgill, Birkenshaw, Cleland, Greengairs, Holytown, Newarthill, Plains, and Quarter.

BURGHES.—*Airdrie.*—The construction of sewage purification works and relative outfalls, referred to as having been commenced on 16th November, 1926, was continued during the year.

Coatbridge.—The question of the method of purification to be adopted for sewage disposal works for Coatbridge was still under consideration at the close of the year. A sewer to convey the sewage of the Old Monkland area to the proposed works at the Luggie Glen was constructed during the year.

Hamilton.—It has to be reported that a commencement was made in March with the construction of a new intercepting sewer for the purpose of removing cause for complaint of serious sewage pollution of the Park Burn, referred to in the report for the preceding year. This new sewer replaces a defective sewer which discharged into the burgh's sewage purification works. The work was completed towards the end of December, and the whole of the sewage is now taken into the sewage works.

Motherwell and Wishaw.—The disposal of the sewage from the Wishaw area continues to be very unsatisfactory. Thus, in February, March, and April, serious pollution of the River Clyde was found to be occurring, due to most of the sewage being discharged without treatment, and in the latter month a complaint was received with regard to this pollution from trade users of the Clyde water, who have a pumping station about two miles below Carbars. At inspec-

tions made during the summer it did not appear that any irrigation at all was being carried out, at least at inspections made on 13th July and 5th August, the whole of the sewage was discharging crude to the river. Similar conditions were observed in October and November. The means of disposal are now totally inadequate, and there is continuous serious pollution of the River Clyde. The question of adequate sewage purification works is still under consideration of the Town Council, and in this connection automatic recording of the flow of sewage has been going on for some considerable time. Complaint was made to the Town Council through the County Clerk.

In connection with a complaint made in December of pollution of the Whinney Burn, pollution was found to be partly due to a discharge of crude sewage from a burgh storm overflow. The burgh authorities were acquainted of the complaint and its causes, and measures were taken to prevent the overflow from the sewer.

Streams.

In connection with trade and sewage pollutions, 2,320 inspections were made, and 1,098 samples taken. The samples, as in previous years, included special weekly samples of the River Clyde and certain of its tributaries.

The following complaints of alleged pollution of streams were investigated and reported on :—

Currie Burn, Shotts.—A complaint was made in June alleging pollution by oil of this stream on the farm of Hillhousesridge. Inquiries made showed that there was reason to complain of such pollution from Springbank Colliery, the oil being said to reach the stream with the pit water. Remedial measures were adopted. These consisted of cleaning out the watercourse, and constructing baffles near the colliery, so as to intercept the oil complained of. A further communication was, however, received towards the end of the year. Samples taken and analysed in connection with this communication showed that the water of the stream complained of was then fit for cattle-watering purposes. The complainer was informed to that effect.

Dippool and Mouse Waters.—The attention of the Upper Ward District Committee, at their meeting held on 17th October, having been directed to the serious pollution of the Mouse Water by iron mine water discharges (in connection with which a representation was forwarded by the District Committee to the County Council), the

County Medical Officer made inquiries and inspections on 20th October to ascertain the condition of these streams as regards pollution, and thereafter made a report which was transmitted to the County Clerk. A communication, dated 2nd November, was also received from the Scottish Board of Health, informing the County Council that the member of Parliament for Lanark Division had directed the Board's attention to the pollution, and asking for a report thereon.

The pollution complained of, as is well known, concerns discharges of mine water containing iron, which flow into the Dippool Water from mines at Woolfords and Pool, and, being water "in the same condition as that in which it has been drained or raised" from these mines, it has been considered could not be dealt with under the Rivers Pollution Prevention Acts, as Section 5 of the Act of 1876 exempts such discharges from the provisions of the Act. The condition of the streams referred to has been the subject of the County Council's earnest consideration from time to time over a long period of years, and in 1921 the County Council resolved to approach the Secretary for Scotland, and urge him to have legislation introduced to amend the law so that pollution of the nature referred to might be effectually dealt with by the Local Authority. A copy of the terms of this resolution was forwarded to the Scottish Board of Health. Later, the matter was raised at a meeting of the County Public Health Committee, held on 30th April, 1924, when instructions were given that it should be kept in mind when the next Provisional Order was being promoted by the County Council.

The County Medical Officer's report on the present complaints showed that Woolfords Colliery is not now in operation, and that, "for a considerable period during which there was no discharge of pit water, the Dippool and the Mouse were in a clean condition, and fish were again to be seen in both these streams. The water in the mine has, however, now reached a level sufficiently high as to overflow from the old pump bore into the Dippool, and, while the flow is comparatively small, it is a very highly concentrated solution of iron which is precipitated in the stream, causing a very serious pollution." With regard to the analyses of samples taken at the County Medical Officer's inspection, the report states:—

These results indicate that the Pool Mine drainage is similar in composition to what it has been for many years. This water contains a small amount of iron in a ferrous state, which will no doubt precipitate in the stream, but undoubtedly the main source of pollution

is the mine drainage from Woolfords. The flow here, although comparatively small when compared with Pool, contains an extraordinary amount of iron in solution, and also free sulphuric acid. Under normal conditions when pumping was in operation at Woolfords Colliery, the pit water was alkaline, and contained about 20 parts of iron, of which a good deal was in suspension. At the present time there is only an overflow from the pump bore, and, while the volume is very much less, the amount of iron has increased from about 20 to over 800 parts per 100,000, and the water contains free sulphuric acid amounting to 77·0 parts per 100,000. To precipitate this iron oxygen and alkali are required, and, before this precipitation can take place, the whole of the acid must be neutralised. This alkali is obtained at the expense of the stream itself, and it is of interest to note that, even in the Mouse 100 yards below the entrance of the Dippool, there is still iron to be precipitated, and only a very small amount of alkalinity remaining for this purpose. In other words, it requires all the clean water entering the Dippool and all the water of the Mouse to provide sufficient alkali to precipitate the iron contained in the overflow from the disused colliery at Woolfords.

The above information was communicated to the District Committee, who instructed the Clerk to write to the County Council expressing their dissatisfaction with the state of the law which permitted the continuance of such pollution, and also stating that the District Committee would be prepared to support the County Council in any effort they might make to obtain the necessary legislation to deal with such cases in future.

Ditch on Allanton Farm, Hamilton.—In connection with a request for an analysis of the water of a ditch which is a water supply for cattle on this farm, and which receives sewage effluent from a few dwelling-houses, a sample was taken on 14th September. The results of analysis, which were satisfactory, were communicated to the farm tenant.

Ditch at Quarter.—A complaint was received towards the end of the year from a dairy farmer alleging sewage pollution of a ditch on his farm. Inquiries were made, and a full report submitted, which showed that there was very little or no ground for complaint as to liquid sewage pollution in the part of the ditch complained of, but that there was good reason to be concerned as to pollution by faecal matter, due to the practice of occupiers of certain houses in Quarter Village depositing privy contents in the ditch. A report, suggesting certain remedial measures, was forwarded to the District Clerk, to whom the complaint was addressed.

Douglas Water.—A tributary of the Douglas Water was reported, on 23rd June, to have been polluted by coal-dross washings from Douglas Castle Colliery. Prior to that date (on 17th May) evidence of pollution was observed in this tributary, when it was also observed that the settling ponds had been recently cleaned out. At an inspection made on 24th June the stream referred to still showed evidence of pollution, and deposits of coal silt were then being washed down by heavy rain. It was also ascertained that previous pollution had occurred when the contents of the silt-recovery tank had been run off quickly owing to some defect, the washings, in an unpurified condition, passing from the settling ponds to the stream. At the time of inspection, however, there was no polluting effluent from the colliery, although, as noted, the stream was polluted owing to the washing away of previously deposited silt.

Luggie Water.—A complaint was received on 3rd March from the Dunbartonshire Authorities, alleging serious pollution of the Luggie Water and River Kelvin, a feature of which was the amount of oil on the surface of the water of these streams. The Medical Officer of Health for Dunbartonshire had traced the source of pollution to be the Mollin Burn. On receipt of the complaint, inspections were at once made by the Rivers Inspector, and subsequently by the County Medical Officer, when serious pollution was found to be coming from Bedlay Colliery and Ammonia Works, due to a very large volume of water being pumped from a new shaft which was being sunk there. This water contained a large amount of oil which might have come from the surface area adjacent to the shaft, which is saturated with oil, or from adjacent workings in which the spent ammoniacal liquor produced at these works is disposed of. Pollution continued for several weeks, but ceased when pumping was stopped on 22nd March. The matter was reported to the Public Health Committee, who agreed with the opinion that, while serious pollution had undoubtedly occurred, it was doubtful if legal proceedings could be taken against the polluters of the streams involved, as the discharge was one of pit water, and as, further, the pumping operations were absolutely necessary for the maintenance and development of the colliery.

Reference might also be made to the Mollin Burn at Bedlay, a small stream which joins the Luggie Water at Mollinsburn, and which first receives the drainage of Bedlay Colliery and by-products plant. This

small stream is as a normal condition polluted by the various effluents from these works, although means are provided for dealing with preventable pollution. Reference is above made to the occurrence of serious pollution in connection with the pumping of water from a new shaft which was being sunk at the colliery. This abnormal pollution ceased about the end of March. At inspections made on 6th and 12th May, however, the stream was found to be badly polluted, and, although inquiries were made, it was not ascertained whether the pollution was due to the ordinary pit-water discharges or to coal-washing or coke-quenching effluents. On 18th May the stream was found to be in better condition, although the pit water was very dirty looking. During the summer the deposit in the stream for a distance of about 400 yards below the works was cleaned out.

Mouse Water.—Complaints of pollution of this stream are referred to under “*Wilsontown Colliery*” (page 44).

River Clyde.—Complaints with regard to sewage pollution are dealt with in the notes on Motherwell and Wishaw sewage disposal (page 59), and as to coal-dross washings pollution in those referring to Broomside Colliery (page 45).

Shotts Burn.—Reference to complaints as to alleged pollution of the Shotts Burn by coal-dross washings is made under “*Hirstrigg Colliery*” (page 40).

Whinney Burn, Dalziel Parish.—A complaint, dated 10th December, with regard to pollution of this stream was received. Inquiries showed that the stream was being polluted by irony pit water from Shields Colliery and crude sewage from a sewer storm overflow, both sources of pollution being within the Burgh of Motherwell and Wishaw. The Burgh Authorities were acquainted of the conditions, and steps were taken to stop the sewage overflow. On 30th December, however, the stream was still found to be polluted by the colliery discharge.

Food and Drugs.

Senior Inspector and Sampling Officer, - CHAS. MACARA.

The work under the Sale of Food and Drugs Acts and relative Regulations and Orders is carried out by three inspectors, a junior inspector having been appointed in May to assist in coping with the extra work entailed in connection with the coming into operation of the Public Health (Preservatives, &c., in Food) Regulations. The following table shows the yearly average number of inspections, administrative samples taken and analysed, with the percentage found deficient, the yearly average samples taken for special purposes for the five quinquennial periods from 1900-1924, and the annual figures for the years 1925-1926-1927 :—

Administrative Samples.

Years.	Inspections.	Procured.	Analysed.	Percentage Deficient.	Special Samples.
1900-04, -	616	338	316	11·27	—
1905-09, -	828	487	480	12·64	—
1910-14, -	789	574	558	12·16	573
1915-19, -	373	340	326	12·96	14
1920-24, -	804	653	647	8·11	107
1925, -	1,506	1,383	1,355	6·49	42
1926, -	1,385	1,339	1,325	6·12	129
1927, -	2,405	1,884	1,876	16·04*	174

* The increase in the percentage deficiencies is accounted for by the additional contraventions under the Public Health (Preservatives &c., in Food) Regulations.

The following tabular statement shows the work carried out in the three districts of the County, and the Burgh of Biggar, and the manner in which the samples were procured, &c. :—

District.	Inspections made.	Samples procured.				Analysed.	
		Formal.	Informal.	Received Privately.	Total.	Public Analyst.	County Chemist.
Upper Ward, -	360	78	230	1	309	80	227
Middle Ward, -	1,779	322	1,029	11	1,362	331	1,026
Lower Ward, -	214	44	120	2	166	44	121
Burgh of Biggar, -	52	26	20	1	47	26	21
Total, -	2,405	470	1,399	15	1,884	481	1,395*

* 8 samples were not analysed.

The following table shows the nature and number of samples purchased and received, the number analysed, and the number found deficient :—

Article.	Procured.	Analysed.	Deficient.
Sweet Milk, - - - -	1,154	1,152	72
Skimmed Milk, - - - -	17	17	—
Cream, - - - - -	1	1	—
Mince, - - - - -	363	363	185
Preserved Cream, - - - -	2	2	—
Condensed and Dried Milk, -	3	3	—
Cheese, - - - - -	2	1	—
Butter, - - - - -	14	14	5
Margarine, - - - - -	4	4	—
Buttermilk, - - - - -	1	1	—
Whisky and Diluted Spirits, -	68	68	18
Fruit Wine, Cordials, -	10	10	2
Apples, - - - - -	3	3	—
Tomatoes, Tomato Soup, - -	2	2	—
Preserved Peas, - - - -	7	6	2
Jam, - - - - -	6	6	—
Sausages and Sausage Meat, -	44	44	4
Cornflour, - - - - -	5	5	—
Brose Meal, - - - - -	7	7	—
Barley, - - - - -	2	2	—
Dried Fruits, - - - - -	4	4	—
Ham and Bacon, - - - -	73	73	3
Coffee with Chicory, - - -	6	6	—
Sauces and Ketchups, - - -	17	17	1
Glaze Cherries & Candied Peel,	4	4	—
Sugar, - - - - -	35	35	—
Malt Vinegar, - - - - -	1	1	—
Essence of Rennet, - - - -	6	5	4
Seidlitz Powders, - - - -	7	7	2
Compound Liquorice Powder, -	2	—	—
Gregory's Powder, - - - -	1	1	—
Mincemeat and Shredded Suet,	2	2	1
Jelly Crystals and Gelatine, -	2	2	—
Mustard - - - - -	2	1	1
Meat Extract and Chilled Meat,	5	5	—
Meat and Malt Wine, - - -	1	1	—
Red Wine, - - - - -	1	1	—
	1,884	1,876	300

Of the 300 deficient samples, 62 were taken formally and 238 informally. The vendors of deficient or adulterated samples are notified of the deficiencies on receipt of the analyses. Informations were lodged with the County Clerk with regard to 55 of the formal deficient samples, and in the remaining 7 (sweet milk 5, rennet 2), the vendors of the milk and the manufacturers of the rennet were cautioned, the deficiencies being small. The vendors from whom the informal deficient samples were procured were kept under observation.

The following table shows the formal non-genuine samples dealt with, and the action taken in each case :—

Reg. No.	Article	Deficiency	Action Taken
48	Sweet Milk,	5 per cent. milk fat,	Proof at Lanark, 18th March, 1927. Fined £3.
40	Sausages,	2·8 grains boracic acid per lb.,	Written caution sent by County Clerk.
272	Preserved Green Peas,	·94 grains of crystallised sulphate of copper,	Written caution sent by County Clerk.
266	Mustard,	15 per cent. wheat flour,	No action taken.
276	Raspberry Cordial.	73 parts or thereby of benzoic acid and 4 parts of salicylic acid,	Manufacturers communicated with.
451	Sweet Milk,	34 per cent. milk fat,	Pled guilty at Lanark, 20th May, 1927. Fined £4.
565	Mince,	192 parts of sulphur dioxide per million,	Pled guilty at Hamilton, 24th June, 1927. Fined 10/-.
566	Do.,	71 do. do.,	Pled guilty at Hamilton, 24th June, 1927. Fined 10/-.
561	Do.,	16 do. do.,	Pled guilty at Hamilton, 10th June, 1927. Fined 10/.
559	Do.,	274 do. do.,	Pled guilty at Hamilton, 24th June, 1927. Fined 10/-.
544	Coffee and Chicory,	120 parts of benzoic acid per million without labelling to that effect,	Written caution sent by County Clerk to manufacturers.
656	Whisky,	35·8° under proof,	Written caution sent by County Clerk.
686	Mince,	30 parts of sulphur dioxide per million,	Pled guilty at Hamilton, 24th June, 1927. Fined 10/-.
730 & 731	Sweet Milk,	(730), Deficient in milk fat 21 per cent. (731), 4 per cent. deficient in milk fat.	Pled guilty at Hamilton, 8th July, 1927. Fined £2.
774	Do.,	3 per cent. deficient in milk solids,	Written caution sent by County Clerk.
735	Mince,	390 parts of sulphur dioxide per million,	Pled guilty at Lanark, 2nd July 1927. Fined 30/-.

Reg. No.	Article	Deficiency	Action Taken
771	Sweet Milk,	4 per cent. deficient in milk fat,	Written caution sent by County Clerk.
777	Whisky,	35·3° under proof,	Written caution sent by County Clerk.
782	Mince,	350 parts of sulphur dioxide per million,	Pled guilty at Hamilton, 2nd July, 1927. Fined £1.
965	Sausages,	930 do. do.,	Pled guilty at Lanark, 29th July, 1927. Fined £1.
1,013	Sweet Milk,	11 per cent. milk fat,	No action taken, as sample taken on delivery proved deficient. See case No. 1034.
939	Sausages,	700 parts of sulphur dioxide per million,	Pled guilty at Hamilton, 29th July, 1927. Fined 10/-.
938	Sweet Milk,	24 per cent. milk fat,	No action taken, as sample on delivery proved deficient. See case No. 993.
928	Sweet Milk,	6 per cent. milk fat,	Proof at Hamilton, 6th September, 1927. Fined £3.
925	Do.,	11 do. do.,	No action taken, as sample taken on delivery proved deficient. See case No. 990.
927	Do.,	11 do. do.,	Pled guilty at Hamilton, 29th July, 1927. Fined £2.
990	Do.,	4 do. do.,	Proof at Hamilton, 13th September, 1927. Fined £3.
993	Do.,	9 do. do.,	Written caution sent by County Clerk, after investigation and "appeal to cows."
1,052	Do.,	6 do. do.,	Pled guilty at Hamilton, 8th September, 1927. Fined £5.
1,034	Do.,	6 do. do.,	Proof at Hamilton, 8th September, 1927. Fined £5.
1,087	Smoked Ham,	8·5 grains of boracic acid per lb.	Written caution sent by County Clerk to manufacturer.
1,146	Sausages,	500 parts of sulphur dioxide per million,	Written caution sent by County Clerk.
1,154	Sweet Milk,	11 per cent. in milk fat.	Proof at Hamilton, 19th and 20th October, 1927. Fined £1.
1,151	Do.,	6 do. do.,	Proof at Hamilton, 17th February, 1928. Presumption rebutted and case dismissed.
1,237	Fresh Butter,	1·10 per cent. excess of water,	Written caution sent to wholesaler.
1,272	Do.,	·80 do. do.,	Written caution sent by County Clerk.
1,340	Butter,	Margarine,	Pled guilty at Hamilton, 27th January, 1928. Fined £2 for supplying margarine in plain wrapper.

Reg. No.	Article	Deficiency	Action Taken
1,489	Sweet Milk,	7 per cent. in milk fat,	Proof at Lanark, 31st January, 1928. Presumption rebutted and case dismissed.
1,579	Mince,	270 parts of sulphur dioxide per million,	Pled guilty at Airdrie, 18th November, 1927. Fined £5.
1,495	Do.,	200 do. do.,	Pled guilty at Airdrie, 18th November, 1927. Fined £5.
1,663	Do.,	420 do. do.,	Proof at Hamilton, 17th January, 1928. Fined £2.
1,612	Do.,	340 do. do.,	Pled guilty at Hamilton, 9th December, 1927. Fined £2.
1,605	Do.,	280 do. do.,	Proof at Hamilton, 17th January, 1928. Not proven. Absence of corroboratory evidence.
1,598	Whisky,	37.7° under proof,	Pled guilty at Airdrie, 6th December, 1927. Fined £1.
1,717	Mince,	360 parts of sulphur dioxide per million, and obstruction,	Pled guilty at Hamilton, 25th January, 1928. Fined £3. Refusal to sell not proved.
1,765	Do.,	240 parts of sulphur dioxide per million,	Pled guilty at Hamilton, 5th January, 1928. Fined £3.
1,574	Do.,	350 do. do.,	Pled guilty at Hamilton, 5th January, 1928. Fined £2.
1,794	Do.,	270 do. do.,	Pled guilty at Airdrie, 10th January, 1928. Fined £5.
1,792	Do.,	380 do. do.,	Pled guilty at Hamilton, 5th January, 1928. Fined £3.
1,795	Do.,	650 do. do.,	Pled guilty at Hamilton, 5th January, 1928. Fined £3.
1,814	Do.,	165 do. do.,	Pled guilty at Lanark, 13th January, 1928. Fined 30/-.
1,815	Do.,	430 do. do.,	Pled guilty at Lanark, 13th January 1928. Fined 30/-.
1,828	Do.,	490 do. do.,	Pled guilty at Airdrie, 10th January, 1928. Fined £5.
	Whisky,	Refusal to sell,	Found not guilty at Hamilton, 15th February, 1928.
1,867	Mince,	150 parts of sulphur dioxide per million,	Pled guilty at Lanark, 13th January, 1928. Fined 30/-.
1,873	Whisky,	36.1° under proof,	Written caution sent by County Clerk.

Milk.—1,152 samples of sweet milk were analysed, and 72 certified to be deficient. The following tables show the samples of sweet milk classified according to the percentages of milk fat and milk solids other than milk fat which they contained, and also according to the business of the vendors, viz., producer wholesalers, producer retailers, wholesalers, and retailers :—

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK FAT.
PRESUMPTIVE STANDARD = 3 PER CENT.

Milk Fat Percentage.	NUMBER OF SAMPLES.				
	Producer- Wholesalers.	Producer- Retailers.	Wholesalers.	Retailers.	Total.
1.9	—	—	—	1	1
2.2	—	—	—	1	1
2.3	—	—	—	2	2
2.4	—	1	—	—	1
2.5	—	—	—	1	1
2.6	—	2	—	4	6
2.7	2	3	—	2	7
2.8	3	5	—	11	19
2.9	2	3	—	3	8
3.0	2	14	—	15	31
3.1	3	25	—	15	43
3.2	2	20	1	24	47
3.3	5	36	—	28	69
3.4	8	43	2	42	95
3.5	5	47	1	50	103
3.6	7	41	1	64	113
3.7	7	57	1	65	130
3.8	8	36	—	49	93
3.9	6	37	—	50	93
4.0	3	42	—	31	76
4.1	2	32	—	16	50
4.2	6	36	—	14	56
4.3	2	15	—	9	26
4.4	2	13	—	9	24
4.5	2	31	—	24	57
and over					
Total,	77	539	6	530	1,152

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK SOLIDS OTHER
THAN MILK FAT.

PRESUMPTIVE STANDARD = 8·5 PER CENT.

Non-fatty Solids Percentage.	NUMBER OF SAMPLES.				
	Producer- Wholesalers.	Producer- Retailers.	Wholesalers	Retailers.	Total.
7·9-8·49	4	8	—	16	28
8·5	4	36	—	24	64
8·6	7	36	—	25	68
8·7	9	65	—	61	135
8·8	12	66	1	77	156
8·9	13	96	2	89	200
9·0	7	83	1	87	178
9·1	11	64	—	72	147
9·2	4	36	1	50	91
9·3	2	26	1	16	45
9·4	2	12	—	11	25
9·5 and over	2	11	—	2	15
Total,	77	539	6	530	1,152

Every case of deficient milk is investigated with a view to finding out the party responsible for it. In the case of a retailer, samples are taken in course of delivery from the producer or wholesaler supplying him. If necessary, an "appeal to the cows" is made, when samples are taken at the byre at milking times. 4 such "appeals to the cows" were made during the year, and the samples procured on these occasions are classified as special samples, and are not included in the figures given in the above tables.

In the first case the deficiency in the original sample was 16 per cent. of milk solids other than milk fat. An "appeal" was made to a herd of 11 cows, samples of whose milk were taken at the morning milking. The cows all yielded milk well above the standard, the average figures of analysis calculated on the yield being 3·9 per cent. of milk fat, and 8·9 per cent. of milk solids other than milk fat. Legal proceedings were accordingly instituted against the farmer, and these were successful.

In the second case, samples taken on delivery from a farmer supplying a small retail shop having been found to be deficient, arrangements were made to have an "appeal to the cows." In this herd there were 26 cows, and these were tested and sampled at four

consecutive morning and evening milkings, an official milker being present to ensure that the cows were properly stripped. The intervals between the milkings were unequal, viz., morning milking 5.30 a.m., and evening milking 3.30 p.m., giving milking intervals of 14 hours and 10 hours. 104 samples altogether were taken, and on analysis it was found that some of the cows were yielding milk under the standard at the morning milking, although the average of the whole herd was well above the standard. As, however, the can containing the quantity of milk supplied to the small retail shop was stated to have been filled up first from about 6 cows, it was deemed inadvisable to institute legal proceedings, but a written caution was given.

In the third case an "appeal" was made to the cows of a producer-retailer, from whom a deficient sample had been procured. The herd consisted of 13 cows, and samples were taken at consecutive morning and evening milkings. The milking intervals were unequal, being $14\frac{1}{2}$ hours at the morning milking and $9\frac{1}{2}$ hours at the evening milking. An official milker was present to see that the cows were properly stripped. The analyses showed that the milk yielded by the individual cows was excellent in quality, and well above the standard, excepting in 4 cows at the morning milking, which were very slightly deficient in solids not fat. The average analysis of the whole herd was :—

	Milk Fat per cent.	Solids not Fat per cent.
Morning Milking, - - -	3.76	8.55
Evening Milking, - - -	4.47	8.96

Legal proceedings were accordingly instituted, but at the proof a verdict of not proven was given.

In the fourth case an "appeal" was made at the request of a small producer-retailer from whose cart a deficient sample had been procured. The herd consisted of 5 cows, and samples were taken at consecutive morning and evening milkings, the milking being conducted in the presence of an official milker to ensure that the cows were properly stripped. The milking periods here were unequal, being 7 a.m. and 5 p.m., giving intervals of 14 hours and 10 hours respectively. 10 samples in all were taken, and on analysis these showed that in every case the cows yielded milk above the standard, the average for the whole herd being as follows :—

	Milk Fat per cent.	Solids not Fat per cent.
Morning Milking, - - -	3.7	8.68
Evening Milking, - - -	4.48	8.93

At the time of milking it was alleged that the official sample, which was a pint bottle already made up, had been filled from the first luggieful from a cow yielding two luggies full of milk. By this means it was sought to account for the deficiency in the sample, it being a well-known fact that the first part of the produce of a cow's udder is always the weaker in fat. Legal proceedings followed, and the defence put forward was that the milk which was sold was the milk of one cow, and that that particular cow was a newly calved one. It transpired in evidence that the calving had taken place some ten days prior to the date upon which the sample was taken. The defence endeavoured to prove that the milk of this cow at the time taken would not be of a high standard of fat, and that the bottle which formed the sample had been filled up from the first luggie of milk drawn from this particular cow. The Sheriff, in reviewing the case, stated that he was satisfied from the evidence that the milk sold to the Inspector was obtained from a cow which was only partially milked, but he was of opinion that an infringement had taken place by the whole milk of the cow not having been properly mixed and the fat evenly distributed over the quantity of milk drawn. He, however, stated that he did not think that there had been a deliberate fraud, but that the taking of the sample produced by the partially milked cow was accidental, and in the circumstances he imposed a modified penalty.

Milk of Special Quality.—In making investigations in connection with the granting of licences for the sale of graded milk under the Milk (Special Designations) Order (Scotland), 1923, 200 inspections were made during the year, and 313 samples, including 32 special samples, were taken for examination in the County laboratories. As regards ordinary milk, 202 of the informal samples procured under the Food and Drugs Acts were examined in the Bacteriological Laboratory, with a view to finding out the cleanliness or otherwise of the milk retailed within the County. As a result of this examination, about 42 per cent. of the samples were found to be unsatisfactory, and 9 re-inspections were made for the purpose of taking further samples in order to ascertain the party responsible for the contamination of the milk. In connection with 26 of the unsatisfactory samples, intimation was given to the District Sanitary Inspector in whose area the vendors' premises were situated. He thereafter instructs a member of his staff to visit the premises during milking time, and

give general instructions as to the care that should be taken to ensure cleanliness of the milk supply. In connection with 112 of the informal samples, a pint of milk was passed through a filter pad of a "minute" sediment tester in presence of the vendors. In 55 of the samples the filter pads were dirty. The dirty pads were shown to the vendors, who were verbally cautioned. Experience has shown that this method of drawing dairymen's attention to the suspended dirt contained in their milk has a very salutary effect. Re-inspection and sampling at the vendors who have been cautioned almost invariably showed a great improvement.

Skimmed Milk.—17 samples of skimmed milk were procured, and were all found genuine. In 22 instances the cans containing skimmed milk on milk carts were not labelled "Skimmed Milk" as required by the Milk and Dairies (Scotland) Order, 1925. The offenders were given a verbal caution.

Butter.—14 samples were purchased, and five of these were found on analysis to be not genuine, two containing an excess of water and three were margarine. Of the three cases of selling margarine for butter, 2 were informal, and 1 was procured formally by means of an agent consequent on the informal sampling. A successful prosecution followed.

Whisky.—68 samples, 17 formal and 51 informal, were procured during the year. Of these, 4 formal and 14 informal samples were deficient. Legal proceedings were successfully instituted in the case of 2 of the formal non-genuine samples. In the remaining 2 the deficiencies were so slight that it was deemed inadvisable to prosecute, but a written caution was given to the offenders. Many of the informal samples were procured by means of an agent, and any deficiencies detected were always followed up by procuring official samples from vendors selling weak whisky. A case of "Refusal to Sell" was reported and legal action taken. The Sheriff, however, held the accused not guilty.

MARGARINE CONTRAVENTIONS.

The following tabular statement shows the number and nature of the contraventions of the Margarine Acts:—

Nature of Contraventions—

Want of statutory labels,	-	-	-	-	2
Want of wrappers,	-	-	-	-	1

Successful legal proceedings were instituted in one case where the dual offence of selling margarine for butter in a plain wrapper and from an unlabelled bulk was concerned. Verbal cautions were given in the other cases.

MISCELLANEOUS ARTICLES.

Apples.—3 samples were procured, and analysed for the presence of arsenic. They were found to be free.

Tinned Tomatoes.—2 samples consisting of tinned tomatoes and tomato soup were procured. The sample of tinned tomatoes was certified on analysis to contain 0.90 grains of tin per lb. The tin had obviously been dissolved from the tin container, but the amount present did not warrant action being taken.

Mustard.—A sample of mustard was certified by the Public Analyst to contain 15 per cent. of wheat flour. This sample was taken owing to a notice of mixture on the label being somewhat ambiguous in meaning, but after consideration it was decided to take no further action in the matter.

Drugs.—The samples of drugs procured and analysed during the year consisted of 2 of liquorice powder, 1 of Gregory's powder, and 7 seidlitz powders. These were all certified to be in accordance with the standards laid down in the British Pharmacopœia, with the exception of 2 samples of seidlitz powder, which were found on analysis to be 16 and 17 per cent. respectively deficient in weight in the contents of the blue paper (sodium potassium tartrate). The powders were manufactured by a firm of manufacturing chemists, who were communicated with. The replies were satisfactory, and the matter was rectified.

PUBLIC HEALTH (CONDENSED MILK) AND (DRIED MILK) REGULATIONS (SCOTLAND), 1923.

Attention was given at all inspections to the requirements of the above Regulations. 3 samples of condensed milk were procured and analysed. In connection with the sale of one of these samples there was an infringement of the terms of the Regulations in so far as the tin did not bear any label, being simply sold as "6d." milk. From the results of analysis the sample should, according to the Regulations, have borne the following declaration on the label affixed to the tin, viz., "Condensed Machine-Skimmed Milk (Sweetened). Unfit for babies. This tin contains the equivalent of $1\frac{7}{8}$ pints of skimmed milk

with added sugar." The Public Health Authority has jurisdiction under these Regulations, and accordingly, an information was lodged with the District Clerk. Legal proceedings were taken at Airdrie Sheriff Court, when a plea of guilty was lodged and a fine of £3 imposed.

SALE OF FOOD ORDER, 1921.

At all inspections attention is given to the requirements of this Order, which relate to the labelling of imported meat excepting ham and bacon, and the prohibition of the words "fresh" or "new laid" in connection with the sale of imported eggs unless labelled "imported" or with the name of the country of origin.

The following contraventions were detected:—

Imported eggs improperly labelled,	-	-	1
Imported meat unlabelled,	-	-	16

3 of the offences of failure to label imported meat were detected conjointly with offences against the Public Health (Preservatives, &c., in Food) Regulations for preservatives in mince. These offences were libelled in the complaints, and the offenders pleaded guilty, and penalties were imposed. The other offenders were cautioned verbally.

PUBLIC HEALTH (PRESERVATIVES, &C., IN FOOD) REGULATIONS (SCOTLAND), AND SALE OF FOOD AND DRUGS ACT, 1927.

The Public Health (Preservatives, &c., in Food) Regulations (Scotland) came into operation on 1st January, 1927. Postponement dates were fixed, ranging from 1st July, 1927, to 1st January, 1928, for the application of the Regulations to certain articles, viz.—Bacon, ham, and egg yolk, butter, cream, and articles prepared with these as ingredients.

By the Regulations it is an offence to manufacture for sale or sell any article of food or drink intended for human consumption which contains any added preservative, or any of the colouring matters specified, provided that certain articles may contain preservatives (sulphur dioxide or benzoic acid) within limits specified in a schedule appended to the Regulations.

The Sale of Food and Drugs Act, 1927, was passed and came into force on 12th April. It brings the above Regulations into line with the law of the Food and Drugs Acts, and any contraventions of the standard amounts of preservative allowed in foodstuffs prescribed by the Regulations are deemed to render the articles injurious to health.

The samples taken under the above Regulations are included in the articles tabulated as procured under the Food and Drugs Act, but for the purposes of records, the number of samples taken under the Regulations may be given as under :—

Mince, 363; fruit wine cordials, 10; preserved green peas, 7; jam, 6; sausages and sausage meat, 44; corn flour, 5; brose meal, 7; dried fruits, 4; ham and bacon, 73; essence of coffee and chicory, 6; sauces and ketchups, 17; glace cherries and candied peel, 4; sugar, 35; essence of rennet, 6; mincemeat, 1; jelly crystals and gelatine, 2; meat extract and chilled meat, 5; meat and malt wine, 1; red wine, 1.

Summary proceedings were not taken under the Regulations for the first three months of the year. The procedure adopted was to procure informal samples of mince and other articles. These were analysed in the Chemical Laboratory for the presence of sulphur dioxide. The butchers or manufacturers from whom articles containing extraneous preservatives were obtained were cautioned by letter in the first instance. In this way 131 letters were sent out. The general explanation in the case of articles containing salicylic and boracic acid was that the articles had been taken from old stock supplied before the Regulations came into force. The explanation was probably correct, as no evidence was found of any trade in these adulterated articles by wholesale merchants.

Fertilisers and Feeding Stuffs Acts.

The sampling under the above Acts is carried out by the Food and Drugs Inspectors. 5 inspections were made, and 9 samples of fertilisers obtained under the Act at the request of a Farmers' Association. All the samples were certified by the Agricultural Analyst to conform to the guarantees on the invoices with the exception of a sample of grain manure, which was certified to be deficient in insoluble phosphates to the extent of 2.14 per cent. Copies of the Analyst's certificates were sent to the buyers and the sellers. 3 samples of feeding stuffs, viz., 2 meat meal marked No. 1 and 2, and 1 bean meal, were received privately, the invoices containing the guarantee being afterwards submitted. On comparison of the invoices with the guarantees, it was found that one of the samples of meat meal, which is used for poultry feeding, was deficient in oil or fat. The manufacturer of the feeding-stuff was communicated with, and he explained that the less oil which the meal contained the greater its value as a feedingstuff for poultry, and that indeed they tried to extract as much oil as they possibly could. This explanation was communicated to, and accepted by the manager of the institution from which the samples were received. The other samples conformed to the guarantees. The following table shows the number of samples obtained and the number found deficient:—

Fertilisers.			Feeding Stuffs.		
Name.	Obtained.	Deficient.	Name.	Obtained.	Deficient.
Bone Meal,	1	—	Meat Meal,	2	1
Ground Mineral Phosphates,	1	—			
Sulphate of Ammonia,	1	—	Bean Meal,	1	—
Cyanamide of Calcium,	1	—			
Superphosphates,	1	—			
Kainit,	1	—			
Grain Manure,	1	1			
30% Potash,	1	—			
Basic Slag,	1	—			
Total,	9	1	Total,	3	1

Shops Acts, 1912-1921.

The work under the above Acts has been carried out by the Food and Drugs Inspectors on the same lines as in previous years, with a view to assisting shopkeepers and their assistants to obtain the benefit of better working conditions conferred on them by the Statute. Legal proceedings against offenders are only instituted as a last resort where cautions have not been effective in putting a stop to infringement of the terms of the Statute. In the main, offenders are generally small shopkeepers and itinerant hawkers. Table D shows the number of inspections to localities, visits to shops and contraventions detected under the Act for the three wards of the County. There were 220 contraventions. These consisted of 8 cases of failure to close at the time fixed on weekly half-holidays and under Closing Orders; 20 cases of selling non-exempted goods, 187 failures to exhibit notices in terms of the Act; 2 failure to give assistants half-holidays, and 3 street trading on the half-holiday.

The following statutory notices were issued to shopkeepers :—

Shop assistants' weekly half-holiday, -	-	4
Mixed shops for exempted goods, -	-	50

The following paragraphs give further particulars regarding inspections made in connection with the administration of the Acts and the irregularities detected :—

Shops' Weekly Half-Holiday.—The weekly half-holiday Orders operative in the County area apply to (1) the Middle Ward; and (2) the Parish of Carluke. By these Orders Wednesday is fixed as the day of the weekly half-holiday. In all the other areas of the County the shopkeepers arrange amongst themselves with regard to the day which they will choose for the closing of their premises in the afternoon, and intimate such arrangement by means of a notice exhibited on their

premises. 139 localities were visited on the day fixed for the weekly half-holiday, and, generally speaking, the closing of shops at 1 p.m. was very well observed. 211 contraventions were detected, consisting of 4 failures to close promptly, 20 cases of the sale of non-exempted articles, and 187 cases of failure to exhibit the statutory notices. Successful legal proceedings were instituted in connection with 6 of the contraventions for the sale of non-exempted goods on the half-holiday, when the Sheriff imposed a penalty of £1 in each case. As regards the other contraventions, it was deemed sufficient to give the offenders a verbal caution.

Early Closing of Shops in the Evening.—A closing Order is in force for all shops in the Parish of Cambuslang, and in Blantyre and Baillieston Special Lighting District applicable to butchers only. There is also a Closing Order for barbers and hairdressers, which applies to the Special Lighting Districts of Aitkenhead and Tannochside, Bellshill and Mossend, Blantyre, Bothwell, Cambuslang, and Uddingston.

10 evening inspections were made in connection with the Closing Orders and the Shops (Early Closing) Act. 4 contraventions were detected, consisting of 4 cases of failure to close promptly. The merchants concerned were verbally cautioned.

In connection with the application from the butchers within the Lower Ward for the formation of a Closing Order for that district, 18 inspections were made and a register of the shops made up for the purpose of taking a vote of the shopkeepers.

Street Trading.—3 contraventions were detected, viz., 3 vendors selling non-exempted goods from lorries on the weekly half-holiday. Verbal cautions were given.

Assistants' Weekly Half-Holiday.—At all inspections special attention was given, with a view to ascertaining that the provisions of the Act were carried out. 2 contraventions were detected. The employers were interviewed, and the matters rectified.

Employment of Young Persons under 18 Years more than 74 Hours per Week.—No contraventions were detected.

Communications.—Many special visits were made as a result of communications received from traders requesting information regarding the provisions of the Act.

Shops Acts.**TABLE D.—SHOWING INSPECTIONS, VISITS TO SHOPS, &c., AND CONTRAVENTIONS IN THE THREE WARDS OF THE COUNTY, 1927.**

Inspections and Contraventions.	Upper Ward.	Middle Ward.	Lower Ward.	Total for County.
Inspections to Localities, - -	16	127	26	169
Visits to Shops, &c., - - -	41	456	69	566
Contraventions—				
Failure to close: Weekly Half-holiday and under Closing Orders, - - - - -	1	6	1	8
Sale of non-exempted goods, -	—	19	1	20
Street Trading, - - - -	—	3	—	3
Failure to give assistants weekly half-holiday at 1.30 p.m., -	—	2	—	2
Failure to give assistants proper intervals for meals, - - -	—	—	—	—
Failure to provide seats for female assistants, - - - -	—	—	—	—
Employing young persons under 18 years more than 74 hours per week, - - - -	—	—	—	—
Failure to exhibit notices in terms of Act, - - - - -	15	159	13	187
	16	189	15	220

By-Laws Regulating Places of Public Refreshment.

5 inspections were made in connection with the application of 2 registered refreshment vendors for permission to make structural alterations to their premises so as to allow them to conduct a carrying-out trade after the hours prescribed by the By-laws. Reports dealing fully with each application were sent to the County Clerk.



COUNTY OF LANARK.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

County Veterinary Inspector's Report

FOR THE

UPPER, MIDDLE, AND LOWER WARD
DISTRICTS

OF THE

COUNTY OF LANARK

AND

THE BURGHS OF BIGGAR AND LANARK,

FOR THE YEAR, 1927.

To—

THE SCOTTISH BOARD OF HEALTH.
 THE COUNTY COUNCIL OF THE COUNTY OF LANARK.
 THE DISTRICT COMMITTEE OF THE UPPER WARD.
 THE DISTRICT COMMITTEE OF THE MIDDLE WARD.
 THE DISTRICT COMMITTEE OF THE LOWER WARD.
 THE TOWN COUNCIL OF THE BURGH OF BIGGAR.
 THE TOWN COUNCIL OF THE BURGH OF LANARK.

MY LORDS AND GENTLEMEN,

I have the honour to submit, herewith, the Second Annual Report of the work done by the Veterinary Department of the County of Lanark, under the Milk and Dairies (Scotland) Act, 1914, for the year 1927.

Introductory.

Whereas my First Annual Report for 1926 showed that an outbreak of Foot-and-mouth disease in the County to some extent interfered with the completion of the inspection of dairy herds for that year, I have to report that during 1927 every known "registered" and unregistered herd in the County and in the Burghs of Biggar and Lanark was duly inspected once, while many were visited on two or three occasions.

As the work of the department is now beyond the capacity of my assistant and myself, the temporary services of some veterinary surgeons practising within the County were enlisted on occasion under the sanction granted by my Committee to enable the completion of the work.

Inspection of Dairy Herds.

The routine veterinary inspection of *ordinary* dairy herds is required to be done only once a year within the County area, and so long as this is the case our present needs can perhaps be most economically met by the periodic bringing in of temporary assistance, although it is true that the volume of duty carried out in the department, as between the months of October and May, could easily keep three full-time Inspectors busy. On occasion the work becomes exceptionally heavy.

As explained in my first Report, full days of routine inspection of dairy herds are only possible during an average period of 24 winter

weeks, when the demand on our services for other duty is at its height, and, further, the veterinary inspection of dairy cows during the grazing period is very much limited to herds near at hand, as it is uneconomical to travel specially to distant herds, in which the hours of milking vary and are inconstant, even in individual byres. Advantage is always taken, however, of the opportunity when called to urgent cases at a distance of visiting any herd that may be in for milking when we are passing.

It may be asked how often dairy herds in County areas should be inspected each year. In City areas the work is done monthly, bi-monthly, or quarterly, with justifiable results considering the convenience of the herds and small travelling costs. County areas present a sterner financial problem. Nevertheless, our experience has shown that when we have been able to make a second or third inspection of some herds at reasonable intervals in the same season, additional cases, amenable to the Tuberculosis Order, have been detected, and this is only to be expected. The confinement of the inspection of dairy herds to one visit per annum is, therefore, a question requiring serious consideration, for many dangerous cases of marked tuberculosis of the udder, and of the lungs, attain a condition of definite clinical development within a surprisingly short period of time, and the detection of a large number of such cases still falls to the Veterinary Inspector, owing to the negligence of many owners to report animals so affected.

Acting on the instructions of the Medical Officer, we continue to limit our interest in structural defects in cowsheds and dairy premises to making notes in our report sheets for the consideration of the Medical and Sanitary Departments. It is perhaps competent, however, for me to record that during the period covered by this report many existing byres have been rendered brighter, healthier, and more fitted for their purpose by the economical provision of more light and better ventilation, which in some outstanding cases have made premises (theoretically defective in cubic space) quite efficient for their purpose.

On several occasions we have received reports from the Cities of Glasgow and Edinburgh that a milk sample taken from the bulk supply of a County herd consigned to their district had been proved to contain tubercle bacilli. In each case immediate inspection of the indicted herd has been carried out, either alone or in company with a Veterinary Inspector of the City concerned, and all necessary measures taken for the detection of the offending animal or animals.

The taking of mixed samples of milk for the detection of animals voiding tubercle bacilli in their produce is not a matter of routine practice in the County, as it is in these Cities, and whether such work would be expedient in the producing area is a question for the Medical Department.

Although the standard of milk production is at a comparatively high level in all three Wards of the County, and of the Burghs whose herds we supervise, there is still room for improvement in many individual cases, regarding which notes are made on our report sheets for the subsequent attention of the Sanitary Authorities. Defective construction (including chiefly unsuitability of the stall for its occupant in respect of length or width, lack of capacity in the dung channel, and defective fall to enable the automatic flow of liquid excreta) is the chief factor in causing soiling of milch cows, and renders the "clean production of milk" laborious. It is in such cases especially that we plead with the owners to clip the hair periodically from the udders, tails, quarters, and flanks of all milch cows to make more easy their hygienic preparation for the process of milking.

Many owners preserve an unwarranted reluctance to clipping, however soiled their animals may be, and incorrigible cases might be dealt with summarily, as it is almost certain that if bulk samples of their produce were submitted to the Laboratory for an estimation of their bacterial content, the declaration of the result would inevitably ensure improvement.

Milk (Special Designations) Order (Scotland), 1923.

At the 31st December, 1927, the number of herds licensed for the production of graded milk within the County was:—"Certified," 17 herds; "Grade A. (tuberculin-tested)," 18 herds, *i.e.*, 35 tubercle-free herds; "Grade A.," 4 herds.

Compared with the figures for 1926 this shows an increase of 3 Certified licences, a decrease of 1 Grade A. (tuberculin-tested) licence, and the existing single licence for "Pasteurised" milk was not renewed.

It is evident that the available supply of graded milk is greater than the demand for the time being, as in a few cases "tubercle-free" milk is being sold as "ordinary," and the knowledge of this is retarding the advance in the number of graded herds, as owners of

herds that are tubercle-free or almost so (and of these we have many) are reluctant to carry a licence which submits them to a special quality of disciplinary inspection. In districts where a desirable attempt (from the public health point of view) has been made to sell certified milk at only 4d. to 8d. per gallon more than ordinary milk, the heavy cost of the capping required under the Order is proving very burdensome, and is retarding a great and immediate increase in the sale of certified milk to industrial people.

It is still too little realised, however, that it is worth while having a tubercle-free herd for what it means in reducing losses in stock alone, and apart from any consideration of increased returns for milk.

Moreover, the better hygienic methods of milk production required under a licence are singularly efficient as a preventive against infectious diseases of the udder, &c., while the maintenance of the licence enables the producer of graded milk to take immediate advantage of any increased demand for such produce.

By adopting the intradermal test in lieu of the subcutaneous along with the ophthalmic test for our graded herds during the past 18 months or so, we have been able to conserve our time to some extent, because we can almost invariably deal with two herds in the same district simultaneously, and as that method of testing, unlike the subcutaneous, does not require our presence at each herd for 24 hours on end (although it imposes the need for three separate visits), it is not relatively destructive of time, for the inspection of other ordinary herds in the same district can be carried through on these days. It is now a moot point whether we should revert for a time to the subcutaneous test, since the last two or three testings of our graded herds have been done by the intradermal method, in addition, of course, to the ophthalmic test.

Of our 35 tubercle-free graded herds, 16 are now under test only once a year, the others being tested twice yearly, and this will continue in the case of the latter until under two successive testings no reactor has been disclosed.

On occasion a herd that has been on a yearly test for a time will disclose one or more reactors. In one case within the period under report a comparatively large number reacted, and having been at once disposed of under declaration at a public sale, when they brought prices beyond the owner's expectation, the licence was continued, and the subsequent testing of this herd early in 1928 revealed no reactors.

In another case, every animal, in the main byre but one, reacted, although ten others in a subsidiary byre near by passed under the same tests, but as this extraordinary case is *sub judice*, further comment is not warranted.

It would be a commonplace saying to declare that infection has crept in when a herd that has been free of reactors for a considerable time eventually shows some defaulters. Some owners of graded herds are not yet sufficiently alive to the fact that "tuberculosis is an infectious disease"—cunningly so in some cases—and neglect to avoid the remotest chance of importing infection.

Occasionally the disease is contracted by the young stock, which may have been grazed *away* under conditions not immaculate, and then we find one or more first-calving heifers reacting, and it is impossible to say when a reacting animal will qualify as a spreader of disease. Certain isolated instances would indicate that very small initial lesions may become "open," and their hosts act as spreaders of infection.

Probably the chief source of infection is the introduction into the herd, either in emergency or otherwise, of animals that have come with a veterinary certificate that they have recently passed the designated tests (as distinguished from the "prescribed tests" under the Order), and without a certified statement that they are out of a tubercle-free herd or have not been exposed to infection.

Although such procedure is eminently risky, and may be even regarded as contrary to the Order, it is permitted in this County without prejudice to the licence. Indeed, even the initial grading of a herd is allowed on the certificate of a private practitioner, who has applied the double test, the "prescribed" test being applied only six months later. In both cases the owner is saved a certain amount of present expenditure, but in the case of the introduction of one or two animals honestly certified to have passed the tests recently, but without any guarantee that they have not been exposed to infection, the action is fraught with mischief, as our records abundantly prove.

Fortunately, the most experienced owners take no advantage of it, and confine any purchases they make to animals out of a safe graded herd.

As indicating the unsafeness of even a calf from an infected herd, I have to record the case of a very large self-supporting herd that never had had a reactor. On one occasion there was included in the

number of heifers that would come into lactation before the next test a year later, a two-year-old about to be mated, and she reacted well to both tests. When called on for an explanation, the chagrined owner stated that he had bought this animal as a calf out of a very special cow in a friend's herd, and had not got possession until it was four days' old.

The owner of a tubercle-free herd, who avoids the very appearance of evil, need never have a reactor, but our experience has shown that tuberculosis is too cunning for the maladroit.

We have not yet made any use of the powers conferred on the Veterinary Inspector, under Section 22 of the Act, to apply the tuberculin test, and as heretofore our use of tuberculin has been confined to our duty as the nominated Veterinary Surgeons under the Milk (Special Designations) Order (Scotland), 1923, and to the occasional testing of obscure cases under the Tuberculosis Order.

The following tables show the figures relative to the work done in 1927, viz. :—

TABLE I.

STATEMENT SHOWING THE NUMBER OF HERDS INSPECTED AND THE
NUMBER OF COWS EXAMINED DURING THE YEAR 1927.

	Upper Ward.	Middle Ward.	Lower Ward.	Total.
Herds inspected, ...	789	938	110	1,837
Cows examined, ...	13,565	18,605	2,431	34,601

TABLE II.

STATEMENT SHOWING THE NUMBER OF COWS FOUND TO HAVE
ABNORMAL CONDITIONS OF THE UDDER.

	Upper Ward.	Middle Ward.	Lower Ward.	Total.
Tuberculosis, ...	24	45	10	79
Suspected Tuberculosis, ...	12	37	3	52
Atrophy, ...	403	488	90	981
Mammitis, ...	63	91	17	171
Induration (non-tubercular), ...	117	165	29	311
Eruptions on Teats, ...	29	32	2	63

TABLE III.

STATEMENT SHOWING THE NUMBER OF MILK SAMPLES TAKEN
AND THE RESULTS OF THE EXAMINATION.

	Upper Ward.	Middle Ward.	Lower Ward.	Total.
Number of samples taken, ...	336	456	103	895
Number found to contain tubercle bacilli, ...	24	50	10	84
Number found to contain other infectious organisms, ...	67	133	34	234
Number negative, ...	245	273	59	577

TABLE IV.

STATEMENT SHOWING THE NUMBER OF ANIMALS SLAUGHTERED UNDER THE TUBERCULOSIS ORDER OF 1925.

District.	Tuberculosis of the Udder.			Tuberculous Emaciation.			Chronic Cough, &c.			Totals.
	Total No.	Number found on Herd Inspection.		Total No.	Number found on Herd Inspection.		Total No.	Number found on Herd Inspection.		
		No.	%.		No.	%.		No.	%.	
Upper Ward,	24	12	50	16	2	12.5	27	1	3.7	67
Middle Ward,	45	27	60	29	9	131	79	22	27.8	153
Lower Ward,	10	8	80	4	2	50	8	4	50	22
Totals,	79	47	59.5	49	13	26.5	114	27	23.6	242

TABLE V.

STATEMENT SHOWING THE NUMBER OF CASES, BOTH NEGATIVE AND POSITIVE, REPORTED UNDER THE TUBERCULOSIS ORDER, OR DETECTED DURING THE ROUTINE INSPECTION OF DAIRY HERDS.

Owner.		Reported by.				Detected by County Veterinary Inspector.		Totals.	
		Private Veterinary Surgeons.		Veterinary Inspectors of other Local Authorities.					
Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
114	176	41	42	5	7	82	63	242	288

Contraventions of the Tuberculosis Order of 1925.

18 contraventions of the Tuberculosis Order of 1925 were reported to the Executive Committee of the County Council, and in 8 cases prosecutions were instituted, letters of warning being addressed to the offenders in the other cases.

In 4 cases fines, amounting to £16, were imposed, while in the remaining cases 2 were found "not guilty" and 2 "not proven."

Burghs of Biggar and Lanark.

In the Burgh of Lanark five herds, comprising 53 cows, and in the Burgh of Biggar one herd, comprising 6 cows, were examined. In no case did we find any evidence of tuberculosis of the udder, nor did our inspections reveal any case amenable to the Tuberculosis Order. One cow in a herd in the Burgh of Lanark, suffering from mammitis, was dealt with under the Act.

I have the honour to be,

MY LORDS AND GENTLEMEN,

Your obedient Servant,

HUGH BEGG,

County and District Veterinary Inspector.

COUNTY OF LANARK

DISTRICT OF THE UPPER WARD.

REPORTS

OF THE

MEDICAL OFFICER OF HEALTH

AND OF THE

SANITARY INSPECTOR

1927

Medical Officer of Health,	- - - - -	County Offices, Hamilton.
Asst. Medical Officer of Health,	}	District Offices, Lanark.
Sanitary Inspector,		

STAFF.

Medical Officer of Health.

J. HUME PATTERSON, F.R.F.P.S.(G.), D.P.H.

Asst. M.O.H. and Tuberculosis Officer.

ALEXANDER FRASER, M.D., D.P.H.

Sanitary Inspector.

WILLIAM PATERSON.

Asst. Sanitary Inspectors.

JOHN INNES

(Certificated Meat Inspector).

ROBERT FRASER.

Nurse Health Visitors, 3.

District Hospital, Roadmeetings, Carlisle.

Physician-Superintendent,	-	-	-	Dr. ALEXANDER FRASER.
Consulting Physician,	-	-	-	Dr. ROBERT B. BARR.
Matron,	-	-	-	Miss I. RAMSAY.

Meat Inspector.

JOHN JARVIE, M.R.C.V.S.

Slaughter-house Superintendents, 4

COUNTY OF LANARK.

DISTRICT OF THE UPPER WARD

(AREA, 326,803 ACRES).

Report by the Medical Officer of Health

FOR THE YEAR 1927.

Vital Statistics.

The **Population**, as estimated for the year 1927, was 48,000. The population of the various parishes is given in Table B.

The number of *inhabited houses*, according to the Valuation Roll, 1927-28, amounts to 10,152, while there were 361 *uninhabited houses*.

Statistical Tables.—Table A shows the birth and death-rates per thousand of the population and the infantile deaths per thousand births for the decennial periods 1891-1900, 1901-10, and 1911-20, as well as those for the years 1921-27.

Table B shows the population, births, and deaths for the year in each parish and registration district, with the deaths classified according to cause.

Table C shows the deaths classified according to cause and age periods.

The **Births** registered in the district, after correction for transfers, numbered **920**—males, 492; females, 428—giving a birth-rate of **19·2** per 1,000 of the population. The number of births is the lowest yet recorded, while the birth-rate for the year is also the lowest recorded.

The number of *illegitimate births* registered in the district, after correction for transfers, numbered 72—males, 58; females, 34—giving an illegitimate birth-rate of 7·8 per 100 births.

The **Deaths** registered in the district, after correction for transfers, amounted to **522**, giving a death-rate of **10·8** per 1,000 of the population.

The deaths of infants under 1 year numbered 64, giving an infantile mortality rate of 69·5 per 1,000 births. A slight increase in the deaths is recorded, 64 as against 52 during the preceding year. The greatest increase in infant deaths occurs in the group of respiratory diseases, 15 being recorded, as against 8 during the preceding year.

The number of births exceeded the number of deaths by 398, constituting the *natural increase* of the population.

Infectious Diseases.—The deaths due to notifiable infectious diseases numbered 64, as compared with 76 during the previous year, and were made up as follows:—Diphtheria, 4; erysipelas, 1; tuberculosis, 38 (pulmonary, 28; abdominal, 4; meningeal, 2; other forms, 4); pneumonia (all forms), 21.

The deaths due to non-notifiable diseases numbered 10, as compared with 9 during the previous year. Measles, 3; whooping-cough, 3; diarrhoea (under 2 years), 4.

Respiratory Diseases.—During the year the deaths (including pulmonary tuberculosis) numbered 121, being an increase of 7 as compared with the previous year, and were as follows:—Pneumonia, (all forms), 21; bronchitis, 33; influenza, 21; pulmonary tuberculosis, 28; and other respiratory diseases, 18. The following statement shows the deaths from respiratory diseases according to months:—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Pneumonia, -	1	2	1	5	2	2	1	—	2	1	3	1	21
Bronchitis, -	4	3	5	3	2	1	1	—	1	2	5	6	33
Influenza, -	1	3	12	2	1	1	—	—	—	—	1	—	21
Pulmonary Tuberculosis, -	2	1	3	1	2	2	6	4	—	2	2	3	28
Other Respiratory Diseases, -	1	3	2	1	1	1	1	1	1	1	2	3	18
	9	12	23	12	8	7	9	5	4	6	13	13	121

The age periods of these deaths are to be found in Table C.

TABLE B.—UPPER WARD.—Year 1927.—Population, Births, and Deaths in each Registration District, with Deaths classified according to cause.

94A

[illegible]

TABLE C.—UPPER WARD.—Year 1927.—Deaths classified according to Cause and Age Periods.

94B

CAUSE OF DEATH	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																			
					Weeks.				Months.				Years.											
					-1	1-2	2-3	3-4	1-3	3-6	6-9	9-12	1-	5-	10-	15-	25-	35-	45-	55-	35-	75-		
Typhoid Fever.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox.	3	...	...	3	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...
Measles.	...	...	...	3	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever.	3	...	...	4	...	...	...	...	...	...	...	...	2	1	1	...	...	...	...	...	...	...	...	...
Whooping-Cough.	4	...	...	4	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Diphtheria.	22	...	1	21	...	...	...	...	...	1	...	1	...	...	...	1	2	1	1	3	9	...	...	...
Influenza.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever.	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas.	25	5	2	28	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis.	2	...	...	2	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...
Meningeal	3	1	...	4	...	...	...	...	...	...	...	...	...	...	2	1	...	1	...	...	...	...	...	...
Abdominal	3	1	...	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Other	1	2	...	3	...	...	...	...	...	...	...	...	...	1	1	2	...	1	1	1	...	...	...	...
Septicæmia and Pyæmia.	6	1	...	7	...	...	...	...	...	...	...	...	...	...	...	1	2	13	13	21	6	...	...	...
Rheumatic Fever.	53	7	4	56	...	...	...	...	...	...	...	...	5	...	...	2	...	1	...	...	...	...	...	...
Malignant Diseases.	6	2	...	8	...	...	...	...	...	...	...	...	...	...	1	...	2	6	12	12	11	...	...	...
Meningitis (simple).	44	2	2	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Cerebral Hemorrhage.	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	1	...	...
Encephalitis Lethargica.	8	1	...	9	...	...	...	...	...	...	...	...	...	...	1	...	4	...	4	6	7	20	18	...
Other Nervous Diseases.	60	5	3	62	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	5	2	...	...
Organic Heart Disease.	9	1	3	7	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	3	12	7	...	...
Other Circulatory Diseases.	34	...	1	33	...	...	...	...	...	6	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis.	17	6	2	21	...	...	...	...	...	1	2	1	1	...	...	...	...	...	...	2	1	8	4	...
Pneumonia (all forms).	17	1	...	18	...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	2	1	2	...	...
Other Respiratory Diseases.	5	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes.	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
Pernicious Anaemia.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dis. of Ductless Glands.	...	8	...	8	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	1	2	...	...	...
Appendicitis and Typhlitis.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5	1	...	...
Liver Diseases (not malign.).	3	4	...	7	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	2	4	...
Other Digestive Diseases.	9	2	...	11	1	...	...	...	...	...	...	...	2	...	...	1	1	3	1	2	4	...	...	...
Nephritis and Bright's Disease.	11	4	1	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Dis. of gen-urin system.	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Dis. of female gen. organs.	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Puerperal Sepsis.	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
Other Dis. & Acc. of Pregnancy.	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Hydrocephalus.	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" Heart.	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" Malformations.	1	...	...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Infantile Convulsions.	5	...	...	5	1	1	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...
Diarrhea (under 2 years).	4	...	...	4	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth.	12	2	...	14	6	3	4	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at Birth.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy, Debility, & Marasmus.	13	1	...	14	9	...	...	1	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation—Overlying.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Dis. peculiar to early Infancy.	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Syphilis.	1	...	...	1	...	...	...	...	...	...	...	...	...	3	1	1	3	5	2	1	5	1	...	...
Violence.	20	9	6	23	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...
Smicide.	3	...	...	3	...	...	...	...	...	...	...	...	1	...	...	2	...	2	2	5	12	38	...	...
Other Defined Diseases.	53	11	1	63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ill-Defined Diseases.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.	467	81	26	522	19	7	6	1	16	7	4	4	25	9	8	25	23	34	45	73	113	103	...	...

The undernoted statistics show the deaths and death-rates per thousand of the population for the past eight years :—

Year.	Pneumonia.		Bronchitis.		Influenza.		Pulmonary Tuberculosis.		Other Respiratory Diseases.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1920	- 34	·75	22	·48	5	·11	27	·6	13	·28
1921	- 33	·71	27	·58	4	·09	20	·43	10	·21
1922	- 54	1·15	30	·64	20	·43	21	·45	19	·41
1923	- 28	·58	19	·39	2	·04	33	·69	14	·29
1924	- 40	·82	46	·95	27	·55	20	·41	20	·41
1925	- 29	·60	15	·31	9	·18	22	·45	20	·41
1926	- 37	·76	28	·58	12	·24	21	·43	16	·33
1927	- 21	·44	33	·68	21	·43	28	·58	18	·37

Malignant Diseases.—The deaths falling under this heading numbered 56—males, 21; females, 35—thus showing an increase in the deaths from malignant disease when compared with the figure of 42 for the previous year, also a preponderance of female deaths over males. The age periods at death will be found in Table C.

The type of disease according to certified cause of death was :—Carcinoma or cancer, 42; sarcoma, 2; rodent ulcer, 1; malignant disease, 11. The location of the disease was as follows :—Some portion of the gastro-intestinal tract, 28 cases; the genito-urinary tract, 8; liver, 6; breast, 8; lung, 1; bone, 1; face, 3; neck, 1.

TABLE A.—BIRTH-RATES AND DEATH-RATES PER 1,000 OF THE POPULATION. INFANTILE DEATHS PER 1,000 BIRTHS.

Year.	Births.	Birth-rate.	Net Deaths.	Death-rate.	Infants under 1 year.	
					Deaths.	Death-rate.
Average. 1891 to 1900	1,222	31·6	606	15·6	116	95·5
Average. 1901 to 1910	1,209	28·9	552	13·2	104	86·5
Average. 1911 to 1920	1,143	25·9	561	12·73	91	80·23
1921	1,225	26·23	541	11·58	76	62·04
1922	1,097	23·40	584	12·45	101	92·06
1923	1,144	23·9	512	10·7	74	64·6
1924	1,119	23·1	581	12·0	86	76·7
1925	1,041	21·5	488	10·1	67	64·3
1926	999	20·7	498	10·3	52	52
1927	920	19·2	522	10·8	64	69·5

PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group 1 includes diseases which are compulsorily notifiable (*a*) under the Notification Act, (*b*) by adoption under the Notification Act, and (*c*) by order of the Scottish Board of Health, and Group 2 not compulsorily notifiable diseases. The diseases included in these groups are as follows:—

GROUP I.

	August, 1906.	1st August, 1912.
Smallpox	Cerebro-spinal Meningitis	Pulmonary Tuberculosis
Diphtheria		1st July, 1914.
Scarlet Fever	24th October, 1912.	All forms of Tuberculosis
Typhus Fever	Acute Poliomyelitis	1st November, 1918.
Typhoid Fever	Tetanus	Ophthalmia Neonatorum
Puerperal Fever	Anthrax	1st August, 1919.
Erysipelas	Glanders	Malaria
	Actinomycosis	Dysentery
		Trench Fever
		Acute Influenzal-Pneumonia
		Acute Primary do.
		26th December, 1924.
		Infective Jaundice
		1st January, 1926.
		Poliomyelitis (Infantile Paralysis)
		Polio-encephalitis
		Encephalitis Lethargica
		25th March, 1927.
		Chickenpox.

GROUP II.

* Measles	Mumps	Ringworm
German Measles		Scabies
* Whooping-Cough		

* Primary cases of those diseases under five years of age have been made notifiable under the Maternity and Child Welfare Scheme.

Table D shows the number of cases of notifiable infectious disease occurring in each parish, and in the following paragraphs the prevalence and distribution of each disease is summarised.

All outbreaks were carefully inquired into, and the usual recognised methods of investigation, isolation, and disinfection were carried out to control the spread of the disease. Where the patient was in any way connected with a dairy farm, special precautions were taken to discover the source of infection, and, in all cases, prompt removal to hospital was obtained.

The following tabular statement shows the housing in relation to notification of infectious disease:—

Disease.	1 apt.	2 apts.	3 apts.	4 apts.	5 apts.	6 apts.	apts. and over	Inst.	Total Cases.
Scarlet Fever, - - -	3	51	30	10	1	12	1	108	
Diphtheria, - - -	8	45	22	4	3	1	—	83	
Chickenpox, - - -	—	48	15	3	3	5	23	97	
Erysipelas, - - -	1	18	5	1	2	—	1	28	
Acute Primary Pneumonia,	5	20	8	5	—	1	2	41	
Influenzal Pneumonia, - —	—	6	2	—	—	—	7	15	
Puerperal Fever, - -	1	2	—	1	—	—	—	4	
Ophthalmia Neonatorum,* -	1	2	—	—	—	—	—	3	
Acute Poliomyelitis, - - —	—	1	—	—	—	—	—	1	
Encephalitis Lethargica, - —	—	—	—	—	—	—	1	1	
Paratyphoid Fever, - - —	—	—	1	—	—	—	—	1	
Pulmonary Tuberculosis, -	3	12	12	6	2	2	9	46	
Non-Pulmonary Tuberculosis,	1	9	5	5	1	1	3	25	

From the preceding table it will be seen that the greatest number of cases of infectious disease occurred in two-apartment houses, but it must be remembered that, according to the 1921 census (on which the following table is calculated), almost half of the population in the Upper Ward occupy houses of this size.

The following table gives the notified cases per thousand of the population in the various apartment houses for the most important infectious diseases. Again, it must be remembered, that the table

has been worked from the population inhabiting the various sized houses as given in the census of 1921, and, also, that the population given there is less than the estimated population of the present year. The erection of houses under the District Committee's various housing schemes will greatly change the relative proportion of the 1, 2, 3, and 4-apartment houses compared to what it was six years ago. This fact will be most noticable in the altered proportion of the three-apartment houses when it is remembered that these have been considerably increased by the building under the District Committee's schemes.

In view of the foregoing statements, it may be expedient to give the figures from which the following table is based:—

			No. of houses.	Population.
One apartment,	-	-	1,164	4,063
Two	„	-	4,226	20,301
Three	„	-	1,610	8,252
Four	„	-	869	4,311
Five	„	-	418	2,251
Six and over,	.		1,029	5,716
Institutions,	-	-	—	1,807

NOTIFIED CASES PER 1,000 OF POPULATION IN VARIOUS APARTMENT HOUSES.

		1 apt.	2 apts.	3 apts.	4 apts.	5 apts.	6 apts. and over.	Institutions.
Scarlet Fever,	-	·7	2·5	3·6	2·3	·4	2·0	·5
Diphtheria,	-	1·9	2·2	2·3	·9	1·3	·2	—
Pneumonia (all forms),	1·2	1·2	1·2	1·1	—	·2	4·9	
Pulmonary Tuber- culosis,	-	·7	·5	1·4	1·3	·8	·3	4·9
Non - Pulmonary Tuberculosis,	-	·2	·4	·6	1·1	·4	·1	1·6
All Diseases,	-	5·6	10·5	12·1	8·1	5·3	3·8	26·0

TABLE D.—Number of Cases of Infectious Sickness recognised in each Parish during 1927.

PARISH	Scarlet Fever.	Diphtheria.	Chickenpox.	Erysipelas.	Acute Primary Pneumonia.	Influenzal-Pneumonia.	Puerperal Fever.	Ophthalmia Neonatorum.	Acute Poliomyelitis.	Dysentery.	Paratyphoid Fever.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Total.
Biggar, - - -	3	1	—	1	—	1	—	—	—	—	—	—	1	7
Carluke, - - -	16	20	34	3	6	—	1	1	1	—	—	7	4	93
Carmichael, - - -	3	1	2	—	—	—	—	—	—	—	—	1	1	8
Carnwath, - - -	16	2	1	—	2	—	—	—	—	—	—	4	3	28
Carstairs, - - -	3	4	7	1	1	—	—	—	—	—	—	—	1	17
Covington, - - -	1	—	3	—	—	—	—	—	—	—	—	—	—	4
Crawford, - - -	12	1	—	1	—	—	—	—	—	—	1	2	1	18
Crawfordjohn, - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Coulter, - - -	1	—	—	—	—	—	—	—	—	—	—	1	—	2
Dolphinton, - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Douglas, - - -	11	8	—	1	—	—	—	2	—	—	—	2	2	26
Dunsyre, - - -	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Lamington, - - -	2	—	—	1	—	—	1	—	—	—	—	1	1	6
Lanark, - - -	8	4	25	—	2	8	—	—	—	—	—	12	4	63
Lesmahagow, - - -	28	41	20	19	29	6	1	—	—	1	—	13	7	165
Libberton, - - -	1	1	—	—	—	—	—	—	—	—	—	1	—	3
Pettinain, - - -	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Symington, - - -	—	—	3	—	1	—	1	—	—	—	—	1	—	6
Walston, - - -	2	—	2	1	—	—	—	—	—	—	—	—	—	5
Wiston - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	108	83	97	28	41	15	4	3	1	1	1	46	25	453

Smallpox.

No cases were reported during the year.

Vaccination (Scotland) Act, 1907.—The returns received from the Registrars showing the number of statutory declarations of conscientious objection to vaccination are tabulated here according to registration district.

	Year 1925.	Year 1926.	Year 1927.
Biggar, - - - -	—	1	—
Carluke, - - - -	108	81	82
Carmichael, - - - -	25	24	26
Carnwath, - - - -	11	10	7
Forth, - - - -	47	46	53
Tarbrax, - - - -	24	19	19
Carstairs, - - - -	6	7	5
Covington, - - - -	3	—	—
Crawford, - - - -	4	4	6
Leadhills, - - - -	3	4	5
Crawfordjohn, - - - -	1	2	2
Coulter, - - - -	—	—	—
Dolphington, - - - -	—	—	—
Douglas, - - - -	34	25	27
Dunsyre, - - - -	—	1	1
Lamington, - - - -	—	1	1
Lanark, - - - -	2	11	8
Lesmahagow, - - - -	88	55	46
Kirkfieldbank, - - - -	7	7	—
Coalburn, - - - -	34	26	20
Libberton, - - - -	—	1	1
Pettinain, - - - -	—	—	1
Symington, - - - -	—	—	—
Walston, - - - -	—	1	—
Wiston, - - - -	—	1	—
	397	327	310

Diphtheria.

The following tabular statement shows the prevalence of this disease since 1892, as well as the number of deaths and the respective rates :—

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1000 Population.	Deaths per 10,000 Population.
Average, 1892-95,	- 78	14	17.9	2.0	3.7
Average, 1896-1900,	- 89	6	6.7	2.2	1.4
Average, 1901-05,	- 66	7	10.6	1.6	1.6
Average, 1906-10,	- 156	7	4.4	3.6	1.7
Average, 1911-15,	- 95	8	8.4	2.1	1.8
Average, 1916-20,	- 82	7	8.5	1.8	1.5
Average, 1921-25,	- 78	4	5.1	1.6	0.8
1926, -	- 107	4	3.7	2.2	0.8
1927, -	- 83	4	4.8	1.7	0.8

Deaths.—The deaths from this disease occurring during the year numbered 4, being the same number as occurred during the previous year. Of these four deaths, three occurred in hospital, one following tracheotomy, while the remaining one died at home.

Notifications.—The total number of notifications received during the year amounted to 83, showing a decrease of 24 in comparison with the number of cases notified in the year 1926. Of the 83 cases notified, 71 or 85.5 per cent. were removed to hospital. The monthly distribution of the cases throughout the year was as follows :—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
15	5	5	4	7	2	5	7	11	3	5	14

It will be seen that the prevalence of the disease was greatest during the first quarter of the year.

The age incidence of the cases and deaths was as follows :—

Ages,	-1	1-5	5-10	10-15	15-25	25-45
Cases,	—	20	28	18	14	3
Deaths,	—	—	2	1	1	—

Table D shows the number of cases notified in each parish, from which it will be seen that the greatest number was notified in the parish of Lesmahagow. The various localities are here detailed :—

Biggar Parish.—1 case (1 death).

Carluke Parish.—Carluke, 11; Law, 7 (1 death); Castlehill, 1; Brownlie Rows, 1.

Carmichael Parish.—Ponfeigh, 1.

Carnwath Parish.—Forth, 1; Carnwath, 1.

Carstairs Parish.—Carstairs Village, 1; Carstairs Junction, 3 (1 death).

Crawford Parish.—Abington, 1.

Douglas Parish.—Glespin, 1; Carniacoup, 6; Douglas West, 1.

Lanark Parish.—Cartland, 1; New Lanark, 3.

Lesmahagow Parish.—Lesmahagow, 4; Coalburn, 16; Kirkfieldbank, 9; Kirkmuirhill, 4 (1 death); Porterhall, 4; Crossford, 2; Bankend, 1; Boghead, 1.

Libberton Parish.—1.

Return Cases.—No cases were counted as return cases during the year.

Dairy Farms.—No case occurred at any dairy farm during the year.

Hospital.—There were 3 deaths in Lanark Burgh Hospital during the year.

Diphtheria Antitoxin.—In connection with the administration of diphtheria antitoxin to the patient before removal to hospital, it is interesting to note that there was some slight improvement in this respect during the year. Of the 83 cases notified, 15 of these received diphtheria antitoxin from the hands of the medical attendant before removal to hospital.

In connection with the bacteriological examination for the presence of the diphtheria bacillus in the throat, it is very gratifying to note that the practice of swabbing the throat is becoming more prevalent, for out of the 83 notified cases, 37 positive swabs were obtained, 2 were returned as negative, while in 44 cases no swab was obtained before admission to hospital.

Scarlet Fever.

The following tabular statement shows the prevalence of this disease since 1892, as well as the number of deaths and the respective rates:—

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1000 Population.	Deaths per 10,000 Population.
Average, 1892-95, -	299	7	2·3	7·88	1·77
Average, 1896-1900, -	326	9	2·7	8·27	2·28
Average, 1901-05, -	187	4	2·1	4·56	0·97
Average, 1906-10, -	235	3	1·2	5·5	0·70
Average, 1911-15, -	264	5	1·9	6·03	1·14
Average, 1916-20, -	156	2	1·5	3·4	0·5
Average, 1921-25, -	312	5	1·4	6·5	1·09
1926,	148	1	·6	3·0	0·2
1927, -	108	—	—	2·2	—

Deaths.—No deaths occurred from this disease during the year.

Notifications.—The total number of cases notified during the year amounted to 108, showing a decrease of 40 in comparison with the number of cases notified during the year 1926. Of the 108 cases notified, 87 or 80 per cent. were removed to hospital. The monthly distribution of the cases throughout the year was as follows:—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
12	10	10	8	10	7	1	7	3	13	11	16

It will be seen that the prevalence of the disease was greatest during the last quarter of the year.

The age incidence of the cases was as follows:—

Ages.	-1	1-5	5-10	10-15	15-25	25-45
Cases, -	1	22	35	24	18	8

Table D shows the number of cases occurring in each parish, and it will be noted that the disease was prevalent in the most populous areas.

The following statement shows the localities in which the cases occurred :—

Biggar Parish.—Biggar, 3.

Carluke Parish.—Carluke, 12; Braidwood, 2; Law, 2.

Carmichael Parish.—Douglas Water, 3.

Carnwath Parish.—Carnwath, 10; Forth, 3; Auchengray, 2; Wilsontown, 1.

Carstairs Parish.—Carstairs Village, 1; Carstairs Junction, 2.

Covington and Thankerton Parish.—Thankerton, 1.

Coulter Parish.—Coulter, 1.

Crawford Parish.—Elvanfoot, 2; Camps Water, 6; Normangill, 4.

Douglas Parish.—Douglas, 2 (1 institution); Douglas Old, 2; Glespin, 2; Happendon, 3; Poniel, 1; Uddington, 1.

Dunsyre Parish.—Dunsyre, 1.

Lamington Parish.—Lamington, 2.

Lanark Parish.—Lanark, 3; New Lanark, 4; Cartland, 1.

Lesmahagow Parish.—Lesmahagow, 4; Kirkmuirhill, 9; Blackwood, 2; Coalburn, 2; Glaikhead, 3; Kirkfieldbank, 3; Boghead, 1; Lintfieldbank, 1; Auchenheath, 1; Stockbriggs, 1; Draffan, 1.

Libberton Parish.—Cormiston, 1.

Walston Parish.—Walston, 1; Elsrickle, 1.

Return Cases.—1 case was counted to be a return case, and the interval which elapsed between the date of dismissal from hospital of the infecting case and the onset of illness in the return case was taken to be six days.

Dairy Farms.—8 cases of the disease occurred amongst children on three farms. Immediate removal of the cases to hospital was obtained in all instances, and, after the usual examination of the inmates and disinfection of the premises, the milk supply was continued.

Two small, but fortunately localised outbreaks, occurred in the parishes of Crawford and Douglas respectively :—

Crawford Parish.—12 cases of the disease occurred during the year, of which 10 occurred in an isolated part of the parish. In connection with these 10 cases, three families were affected, 3 cases occurring in the first family, 3 in the second, and 4 in the third. Infection was spread by contact. On notification of the first cases, the initial case was

found to be desquamating, and the source of infection was taken to be outwith the district, as the patient had sickened a few days after a visit to a neighbouring city. All cases made a good recovery.

Douglas Parish.—11 cases of the disease occurred in this parish during the year. Of these, 6 occurred in the neighbourhood of Douglas Old, and affected four families—3 cases occurring in the first family, and 1 in the second, third, and fourth respectively. All the patients except one were of school age, and travelled from Douglas Old Station to Douglas West Station by train, where they attended school. Altogether 10 children attended Douglas West School from this district, travelling in company from Douglas Old Station. With a view to preventing the transference of the disease to the village of Douglas West, the remainder of these children were excluded from school for the requisite period. No further cases occurred, and no cases occurred in the village of Douglas West. The source of infection of the primary case was not discovered. All patients made a good recovery.

Enteric Fever.

The following tabular statement shows the prevalence of this disease since 1892, as well as the number of deaths and the respective rates:—

Year.	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1000 Population.	Deaths per 10,000 Population.
Average, 1892-95,	- 46	6	12.4	1.2	1.5
Average, 1896-1900,	- 27	5	17.6	0.6	1.2
Average, 1901-05,	- 20	4	18.8	0.4	0.9
Average, 1906-1910,	- 13	2	17.4	0.3	0.5
Average, 1911-15,	- 6	1	23.3	0.13	0.3
Average, 1916-20,	- 3	0.2	5.9	0.01	0.02
1921, -	- 1	—	—	.02	—
1922, -	- —	—	—	—	—
1923, -	- 3	1	33.3	.06	0.2
1924, -	- —	—	—	—	—
1925, -	- —	—	—	—	—
1926, -	- —	—	—	—	—
1927, -	- —	—	—	—	—

Paratyphoid Fever.

1 case was reported during the year. When seen, the patient had been complaining for about ten days, and had suffered from headache, sickness, and diarrhœa. "Rose spots" were present on the abdomen and chest, and the patient appeared to be in the "typhoid" state. The temperature was 103°. Complaint was also made of some tenderness on palpation over the lower part of the abdomen. The case was removed to hospital as one of suspected enteric fever. Two days after admission to hospital, symptoms of perforation appeared, and a laparotomy was performed, and a small perforation was found at the tip of the appendix. Blood tests proved the case to be suffering from paratyphoid fever (B). The patient made a good recovery and has been discharged from hospital.

Cerebro-Spinal Meningitis.

No cases were reported during the year.

Erysipelas.

28 cases were notified during the year, 1 of which was removed to hospital. 1 death occurred. The age periods of the cases and death are as follows:—

Ages,	-1	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-65	65-75
Cases,	—	—	3	2	1	3	9	3	3	4
Death,	1	—	—	—	—	—	—	—	—	—

The distribution of cases according to parish will be found in Table D.

Pneumonia.

The notifications of acute primary pneumonia numbered 41, while 15 cases of influenzal pneumonia were notified, the total number of pneumonia cases being slightly more than the total notifications of last year. The age periods of incidence are as follows:—

Acute Primary Pneumonia—

-1	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-75
4	11	6	2	6	2	2	4	4

Influenzal Pneumonia—

-1	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-75
2	1	1	5	3	—	—	—	3

The death-rate and number of deaths will be found under the heading of respiratory diseases.

Dysentery.

1 case was reported during the year.

On visiting the case it was found that all symptoms had passed off, and that the patient was in a good state of health.

Encephalitis Lethargica.

1 case was reported during the year.

On inquiries being made, it was discovered that the patient had been notified from a poor-law institution in the locality, having been transferred there from a poor-law institution in Glasgow by the parish to which he was chargeable. The patient had apparently suffered from the disease a considerable time previously, and his admission to the poor-law institution in Glasgow was due to the relatives not being able to provide proper accommodation and attention.

Acute Poliomyelitis.

1 case of this disease was notified during the year.

This case was only discovered on medical advice being sought on account of the child's inability to move its right arm.

Chickenpox.

The Public Health (Chickenpox) Regulations (Scotland), 1927, dated 25th March, 1927, made this disease notifiable forthwith. These regulations were to have effect until 30th September, 1927, but have been continued, and are now to remain in force until 31st December, 1928.

97 cases of the disease were notified. The type of the disease was very mild, and the distribution of cases in the various parishes will be found in Table D.

The age incidence of the cases was as follows:—

Age.	.1	1-5	5-10	10-15	15-25
Cases, - - - -	6	42	39	8	2

Puerperal Fever.

4 cases of this disease were notified during the year by the medical practitioners in attendance. 3 of these cases were treated in hospital, while 1 was treated at home. 1 death occurred at home. Further reference with regard to these cases will be found in the section dealing with Maternity and Child Welfare.

Ophthalmia Neonatorum.

3 cases were notified during the year by the medical practitioners in attendance. 1 case was treated in hospital. Further reference will be found in the section dealing with Maternity and Child Welfare.

Non-Notifiable Diseases.

The sources of information available to the Department regarding the prevalence of measles, whooping-cough, mumps, chickenpox, &c., are as follows:—(1) Information sent by headmasters for the purpose of certification of scholars absent on account of infectious disease; (2) application made by school authorities for closure of schools when the attendance is interfered with by epidemic prevalence; (3) information obtained by the Nurse Health Visitors in the course of their duties; (4) the return of deaths received from the local Registrars; and (5) notification of primary cases of measles and whooping-cough under the Maternity and Child Welfare Scheme.

Measles.—There was a definite decrease in the number of cases of measles which came to the knowledge of the Department, 208 cases occurring, in comparison with 375 during the previous year. These cases occurred in the following parishes:—Biggar, 3; Carluke, 10; Carmichael, 2; Carnwath, 51; Carstairs, 64; Crawfordjohn, 1; Lamington, 3; Lanark, 1; Lesmahagow, 72; Libberton, 1.

The age periods of incidence and deaths are as follows:—

		-1	1-3	3-5	5-10	10 and over
Cases,	- -	14	55	56	77	6
Deaths,	- -	1	1	—	1	—

Deaths.—3 deaths occurred from the disease in the following registration districts:—Tarbrax, 1; Coulter, 1; Lesmahagow, 1. The ultimate cause of death, according to certification was:—Pneumonia, 1; broncho-pneumonia, 2.

Whooping-Cough.—There was an increase in the number of cases of this disease occurring during the year. In all, 138 cases came to the knowledge of the Department, and were distributed as follows:—Carluke, 28; Carnwath, 4; Carstairs, 1; Crawford, 7; Douglas, 12; Dunsyre, 14; Lesmahagow, 72.

The age periods of incidence and deaths are as follows:—

		-1	1-3	3-5	5-10	10 and over.
Cases,	- -	31	30	34	41	2
Deaths,	- -	—	3	—	—	—

Deaths.—3 deaths occurred from the disease in the following registration districts:—Carluke, 1; Kirkfieldbank, 1; Coalburn, 1. The ultimate cause of death, according to certification, was:—Convulsions, 1; congestion of lungs, convulsions, 1; tubercular peritonitis, 1.

The following tabular statement shows the death-rate per 10,000 of the population, and the actual number of deaths during the past seven years for these two diseases:—

Year.	Measles.		Whooping-Cough.	
	Deaths.	Death-rate per 10,000.	Deaths.	Death-rate per 10,000.
1921,	—	—	17	3·6
1922,	8	1·7	10	2·1
1923,	4	·8	12	2·5
1924,	13	2·6	10	2·0
1925,	1	·2	11	2·2
1926,	6	1·2	—	—
1927,	3	·6	3	0·6

Under the Maternity and Child Welfare Scheme, primary cases of measles and whooping-cough in children under 5 years are notifiable.

Hospital Admissions.—2 cases of whooping-cough and 1 case of measles were admitted to the County Hospital, Motherwell.

School Closure.

No schools were closed during the year on account of infectious disease. It was found necessary, however, to make several visits to various schools for the purpose of examining the scholars with a view to detecting unrecognised or missed cases of infectious disease. These included Carluke Junior School, Biggar, and Kirkfieldbank.

Anthrax.

4 outbreaks of this disease in cattle were reported during the year, and occurred in the following parishes:—Libberton, 1; Thankerton, 1; Biggar, 1; Carnwath, 1. The animals affected numbered 4. No cases of suspicious illness occurred amongst those persons in contact with the diseased animals.

Venereal Diseases.

The treatment of these diseases is carried out under the Scheme of the Joint-Committee for Venereal Diseases. During the year 35 new cases were reported (gonorrhœa, 29; others, 1). Of these, 9 cases (gonorrhœa, 8; others, 1) received hospital treatment, while the remaining 26 (gonorrhœa, 21; others, 5) received outdoor treatment at the various clinics. The total attendances at the various clinics numbered 449—gonorrhœa, 412; syphilis, 27; others, 10. Specimens of blood for the Wassermann reaction numbered 13, of which 9 were reported positive and 4 negative, while of 9 bacteriological tests for the presence of gonococci, 8 were returned as negative and 1 as positive.

Hospitals.

The two principal epidemic diseases—scarlet fever and diphtheria—were less prevalent than during the previous year, and in the following statement the number of admissions to hospital will be found, the cases being admitted to Lanark Burgh Fever Hospital or the County Hospital, Motherwell, as accommodation could be obtained.

The building of the infectious disease hospital at Roadmeetings has made excellent progress during the year, and at a meeting of the Public Health Committee held on the grounds satisfaction was expressed at the progress made. It is hoped that the new hospital will be ready for occupation by the middle of the ensuing year.

The admissions to hospital during the year were as follows :—

	Burgh Hospital, Lanark.	County Hospital, Motherwell.	Total.
Scarlet Fever, - - - -	72	14	86
Diphtheria, - - - -	56	16	71
Erysipelas, - - - -	—	1	1
Puerperal Fever - - - -	—	3	3
Ophthalmia Neonatorum, - -	—	1	1
Paratyphoid "B," - - - -	—	1	1
	128	36	163

Tuberculosis.

The Burghs of Biggar and Lanark being included in the Upper Ward District Tuberculosis Scheme, statistics relating to the three areas are given separately.

Upper Ward.—The following tabular statement shows a marked decline in the deaths and death-rate from tuberculosis since the commencement of County administration :—

Annual Average—	PULMONARY.			NON-PULMONARY.		
	Cases Notified.	Deaths Registered.	Death-rate per 10,000 Population	Cases Notified.	Deaths Registered.	Death-rate per 10,000 Population
1891-95,	—	45	12·0	—	23	6·2
1896-1900,	—	47	11·9	—	17	4·4
1901-05,	—	43	10·5	—	20	4·9
1906-10,	36	35	8·1	—	15	4·4
1911-15,	50	32	7·0	—	13	2·8
1916-20,	43	28	6·3	25	15	3·3
1921, -	33	20	4·3	32	15	3·2
1922, -	48	21	4·5	32	17	3·6
1923, -	51	33	6·9	30	11	2·3
1924, -	42	20	4·1	42	13	2·6
1925, -	37	22	4·5	24	15	3·0
1926, -	32	21	4·3	32	11	2·2
1927, -	44	28	5·8	24	10	2·1

Mortality.—The deaths from all forms of tuberculosis numbered 38, and were classified as follows :—Pulmonary, 28; abdominal, 4; meningal, 2; other forms, 4. The deaths will be found classified according to parish in Table B.

The death-rate for all forms of the disease was 0·79 per 1,000 of the population. The death-rate of the various forms of the disease, and also the age incidence of the deaths, will be found in Table C.

Deaths in relation to Notification.—There are still a number of cases in which medical practitioners fail to carry out their legal duties, and notify punctually when the case becomes known. Some cases are not notified until death is approaching, and in others the case only becomes known when the local Registrar's return of deaths is received.

Of the 38 net deaths from tuberculosis, 28 were of the pulmonary form. Of these, 20 were notified (1 after death), leaving 8 not notified. Of the total net deaths, 11 occurred in institutions.

The period elapsing between notification and death was :—Under 1 month, 1 case; 1-3 months, 10; 3-6 months, 1; 6-9 months, 0; 9-12 months, 0; 1-2 years, 2; over 2 years, 5; notified after death, 1.

Of the 38 net deaths from tuberculosis, 10 were of the non-pulmonary type. Of these, 6 were notified (1 after death), leaving 4 not notified. Of the total net deaths, 4 occurred in institutions.

The period elapsing between notification and death was:—Under 1 month, 2 cases; 1-3 months, 0; 3-6 months, 0; 6-9 months, 0; 9-12 months, 1; 1-2 years, 0; over two years, 2; notified after death, 1.

Notifications.—The number of cases notified amounted to 71—pulmonary, 46; non-pulmonary, 25—showing an increase of 3 in comparison with last year. Of the 46 new pulmonary cases, 2 had been previously notified, leaving 44 new cases notified during the year. Of these 44 pulmonary cases, 11 died and 11 left the district, leaving 22 new cases on the register at the end of the year. Of the 25 non-pulmonary cases notified, 1 had been previously notified, leaving 24 new cases. Of these 24 new cases, 6 died and 2 left the district, leaving 16 new non-pulmonary cases on the register at the end of the year.

Housing in relation to notification:—

	1 apt.	2 apts.	3 apts.	4 apts.	5 apts.	Over 6 apts.	Institution	Total.
Pulmonary Tuberculosis,	3	12	12	6	2	2	9	46
Non-Pulmonary, -	- 1	9	5	5	1	1	3	25

The *age incidence* of the cases notified was as follows:—

Ages	-1	1-5	5-15	15-25	25-45	45-65	65 and over.	Total.
Pulmonary,	—	1	9	14	21	1	—	46
Meningeal,	—	1	—	—	1	—	—	2
Abdominal,	1	1	2	—	—	1	—	5
Other Forms,	—	3	3	4	6	2	—	18
Total, -	1	6	14	18	28	4	—	71

The *occupations* of the cases notified were classified thus:—Car bodybuilder, 1; chauffeur, 1; clerks, 2; engineers, 2; factory workers, 3; farmers, 3; farm servants, 3; fish merchant, 1; gamekeeper, 1; housewives, 15; labourers, 2; miners, 3; police constable, 1; scholars, 15; shop assistant, 1; signalman, 1; tailoress, 1; wagon builder, 1; no occupation, 9; none stated, 5.

Total Cases on Record.—The total cases on record as shown in the following statement amounted to 168—pulmonary, 89; and non-pulmonary, 79.

Changes during 1927.

	Cases in District 1-1-27.	New Cases.	Total on Record.	Left District.	Died.	Off List.		Cases in District 31-12-27.
						Disease apparently Arrested	Diagnosis Revised.	
Pulmonary, -	115	44	159	21	22	25	2	89
Non-Pulmonary,	106	24	130	6	11	34	—	79

The 25 pulmonary cases taken off the list consist of cases in which the disease is apparently arrested, a period of three years or more having elapsed without any further breakdown in the condition of the patient. The 34 non-pulmonary cases taken off the list are mainly those of cervical glands and bone lesions which have been operated on and have healed with no recrudescence—cervical glands, 21; bone, 7; abdominal, 5; and abscess, 1.

In 2 cases which were notified in the years 1925 and 1926, the diagnosis was revised to (1) capillary bronchitis; and (2) simple goitre.

The cases receiving *domiciliary treatment* numbered 23.

The cases receiving *institutional treatment* are dealt with under the heading “Sanatoria.”

Burgh of Lanark.—During the year there were 2 deaths from tuberculosis—pulmonary form.

The *notifications* received numbered 9. The notifications, according to the form of the disease, were as follows:—Pulmonary, 8; non-pulmonary, 1.

The *occupations* of the cases notified were classified thus:—Compositor, 1; clerkess, 1; domestic servants, 2; factory workers, 2; housewife, 1; railway porter, 1; slater, 1.

The *age incidence* of the cases notified was as follows:—

	1-5	5-15	15-25	25-45	45-65	65 and over.	Total.
Pulmonary, -	—	—	4	3	1	—	8
Non-Pulmonary,	—	—	1	—	—	—	1

Institutional Treatment.—9 cases—6 pulmonary and 3 non-pulmonary—received treatment in the District Sanatorium, Road-meetings. 1 pulmonary case received treatment in Longriggend Sanatorium.

Domiciliary Treatment.—5 cases received treatment.

Burgh of Biggar.—During the year 2 deaths were registered from tuberculosis—non-pulmonary form.

The *notifications* received numbered 2. The notifications, according to the form of the disease, were as follows:—Pulmonary, 1; non-pulmonary, 1.

The *occupations* of the cases notified were classified thus:—Housewives, 2.

The *age* of the pulmonary case notified was 29, and of the non-pulmonary case 21.

Institutional Treatment.—2 cases—1 pulmonary and 1 non-pulmonary—received treatment in the District Sanatorium, Roadmeetings.

Domiciliary Treatment.—No cases received treatment.

SANATORIA.

District Sanatorium, Roadmeetings.

The District Hospital at Roadmeetings is reserved for the treatment of tuberculosis. During the year 56 cases were admitted—48 from the Upper Ward, 2 from the Burgh of Biggar, and 6 from the Burgh of Lanark.

Patients Treated.—10 pulmonary and 9 non-pulmonary cases were in residence at the beginning of the year, and during the course of the year 39 pulmonary and 17 non-pulmonary cases were admitted, making the total number of patients under treatment during the year 75.

During the year 26 pulmonary and 19 non-pulmonary cases were discharged, and 9 pulmonary and 1 non-pulmonary cases died, leaving 14 pulmonary and 6 non-pulmonary cases under treatment at the close of the year.

Place of Residence.—The parishes of residence of the cases discharged were as follows:—Carluke, 8; Carmichael, 2; Carnwath, 6; Crawford, 3; Douglas, 5; Lanark, 2; Lesmahagow, 11; Burgh of Biggar, 2; Burgh of Lanark, 6.

Age and Sex.—The cases discharged are shown in the following table, classified according to age and sex, and according to age groups for both sexes. In each age group the number of pulmonary, non-pulmonary, and non-tuberculosis cases are shown :—

Age Periods.	Males.	Females.	Sexes.		Pul-monary.	Non-Pul-monary.	Non-Tuber.	Total.
-5	1	1	2	Pre-school age.	—	2	—	2
-10	3	2	5	School age.	6	5	—	11
-15	4	2	6					
-20	—	7	7	Adolescence.	9	5	1	15
-25	2	3	5					
-30	1	2	3					
-35	1	4	5	Early Maturity.	6	3	—	9
-40	2	2	4					
-45	—	—	—					
-50	—	3	3	Late Maturity.	3	4	1	8
-55	1	1	2					
-60	—	2	2					
-65	—	1	1					
15	30	45			24	19	2	45

Pulmonary Cases Discharged.

Duration of Illness.—The duration of illness on admission, stated in monthly periods, was as follows :—

Months—	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
	7	5	2	2	1	9	26

Earliest Manifestations.—From the histories of illness, taken on admission, the earliest signs or symptoms indicative of a departure from normal health were :—Cough, 12; influenza, 3; pneumonia, 1; pyrexia, 2; hæmoptysis, 1; debility, 5; bronchitis, 2—total, 26.

General Results.—The general condition on discharge may be given as follows :—Very much improved, 20; improved, 2; unchanged, 4—total, 26.

Non-Pulmonary Cases Discharged.

The cases discharged during the year numbered 19. These may be classified as follows :—Cervical adenitis, 2; abdominal, 4; bone, 12; meningeal, 1.

Duration of Illness.—The duration of illness on admission, stated in monthly periods, was as follows :—

Months—	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
	4	—	3	4	—	8	19

General Results.—The general condition on discharge may be given as follows:—Very much improved, 10; improved, 7; unchanged, 2—total, 19.

Other Institutions.

In addition to the cases treated at the District Sanatorium, cases were treated in other institutions in the County, viz.:—County Hospital, Motherwell, 1; Hairmyres Colony, 3; Stonehouse, 2; Uppertown, 1.

Refractories Industries (Silicosis) Scheme.

A Medical Board has now been set up which is responsible for the periodic examination of all workers connected with the above scheme, but under paragraph 33 of the 1925 scheme the Tuberculosis Officer is responsible for the initial examination of all workmen newly employed on receipt of notification from the employer. No such examination was carried out during the year, as the only brickwork under the scheme has now stopped working.

MATERNITY AND CHILD WELFARE.

While the Burgh of Biggar and Lanark are included in the Upper Ward Scheme, the statistics relating to the three areas are given separately.

UPPER WARD.—Staffing Arrangements.—The staffing arrangements remain as stated in previous reports. Three whole-time Nurse Health Visitors are employed, and the services of the District Nurses in Biggar, Crawford, Thankerton, Forth, and Lesmahagow are obtained as part-time Health Visitors in connection with this scheme.

Births.—The number of births registered in the Upper Ward, corrected for transfers, numbered 920—males, 492; females, 428—the birth-rate for the year being 19·2 per 1,000 of the population. Of the 920 births, 72 were illegitimate—males, 38; females, 34—giving an illegitimate rate of 7·8 per 100 births.

Notification of Births.—Of the total births, corrected for transfers, 854 were registered in the district, and of these 832 were notified, or 97 per cent. In addition, 23 still-births were notified—22 by the medical practitioner in attendance and 1 by a certified midwife. Of the total births (not corrected for transfers), 828 were attended by doctors, 68 by certified midwives, and 2 by uncertified midwives.

Table E shows the births registered, births notified, visits made by the Nurse Health Visitors, the attendant at confinement, as ascertained at the first visit, infant deaths registered, and the infantile death-rate, the information being tabulated according to registration districts, and sub-divided into agricultural and industrial areas.

TABLE E.

116A

REGISTRATION DISTRICTS.	BIRTHS.		NUMBER OF VISITS.					ATTENDANT AT CONFINEMENT.			INFANT DEATHS.	
	Registered (corrected for transfers).	Notified.		First.	Subsequent.	Special.	TOTAL.	Doctor.	Certified Midwife.	Handy Woman.	Registered Deaths (corrected for transfers).	Infant Mortality Rate.
<i>Chiefly Industrial.</i>		Alive.	Still-born.									
Carlisle, ...	235	234	...	198	1,433	45	1,676	230	4	...	15	...
Carmichael, ...	28	30	1	31	276	22	329	26	5	...	1	...
Carnwath, ...	35	33	...	30	132	4	166	32	1	...	6	...
Forth, &c., ...	66	65	5	53	492	...	545	67	3	...	3	...
Farbrax, ...	22	24	...	19	456	51	526	21	3	...	5	...
Caerstairs, ...	37	35	1	30	406	72	508	36	...	...	1	...
Leadhills, ...	13	13	...	...	...	...	...	13	...	...	...	...
Douglas, ...	63	63	1	49	600	45	694	63	1	...	3	...
Lanark, ...	45	45	1	36	339	36	411	35	9	2	4	...
Lamshagow, ...	192	181	7	137	1,242	52	1,431	158	30	...	16	...
Kirkfieldbank, ...	34	34	1	21	387	70	478	25	10	...	2	...
Coalburn, ...	65	65	1	54	743	36	833	66	...	...	4	...
Total, ...	835	822	18	658	6,506	433	7,597	772	66	2	60	71.7
<i>Chiefly Agricultural.</i>												
Biggar, ...	7	7	...	11	46	4	61	7	...	...	...	...
Covington, ...	4	5	1	6	109	14	129	6	...	...	...	...
Crawford, ...	15	12	1	16	80	4	100	12	1	...	1	...
Crawfordjohn, ...	13	10	...	13	43	...	56	9	1	...	...	...
Culter, ...	7	6	...	6	44	3	53	6	...	...	...	...
Dolphinton, ...	3	3	...	...	...	...	...	2	1	...	...	...
Dunsyre, ...	4	2	...	...	...	...	...	2	...	...	...	...
Lamington, ...	5	4	...	...	...	...	...	4	...	...	...	...
Labberton, ...	10	10	...	1	14	9	24	10	...	...	...	...
Pettinain, ...	5	5	2	5	93	11	109	7	...	...	2	...
Symington, ...	3	3	1	4	21	2	27	4	...	...	...	...
Walston, ...	2	2	...	...	...	...	...	2	...	...	...	...
Wiston, ...	7	7	...	...	...	...	...	7	...	...	1	...
Total, ...	85	76	5	62	450	47	559	78	3	...	4	47.0
Combined Total,	920	898	23	720	6,956	480	8,156	850	69	2	64	69.5
Burgh of Biggar, ...	16	12	...	11	109	11	131	12	...	...	1	62.5
Burgh of Lanark, ...	127	125	4	84	863	107	1,054	110	18	1	6	47.2
Total, ...	1,063	1,035	27	815	7,928	598	9,341	972	87	3	71	66.7

Infantile Mortality.—After correction for transfers, the deaths of infants under 1 year numbered 64—males, 31; females, 33—showing an increase of 12 in the infant deaths compared with the previous year. 59 of the total net deaths were registered in the district, and of the 64 deaths 33, or 51·5 per cent., occurred during the first four weeks of life. Of these 33 deaths, 23 were due to premature birth, atrophy, debility, and marasmus. The certified causes of death will be found in Table F.

Infantile Mortality Rates.—Infant deaths numbered 64, giving an infantile mortality rate of 69·5 per 1,000 births for the year. Of these deaths, 55 were of legitimate infants—males, 26; females, 29—giving a legitimate mortality rate of 65 per 1,000 legitimate births, while the illegitimate deaths numbered 9—males, 5; females, 4—giving an illegitimate mortality rate of 125 per 1,000 illegitimate births.

TABLE F

	Weeks.		Months.			Total.
	.1	1-4	1-3	3-6	6-12	
Chickenpox, - - - - -	—	—	—	—	—	—
Measles, - - - - -	—	—	—	—	1	1
Scarlet Fever, - - - - -	—	—	—	—	—	—
Whooping-Cough, - - - - -	—	—	—	—	—	—
Diphtheria and Croup, - - - - -	—	—	—	—	—	—
Erysipelas, - - - - -	—	—	1	—	—	1
Tuberculous Disease, - - - - -	—	—	—	—	1	1
Meningitis (not Tuberculous), - - - - -	—	—	—	—	—	—
Hydrocephalus, - - - - -	—	—	—	—	—	—
Convulsions, - - - - -	1	2	—	1	—	4
Pneumonia (all forms), - - - - -	—	—	1	2	2	5
Influenza, - - - - -	—	—	1	—	1	2
Bronchitis, - - - - -	—	—	6	2	—	8
Diarrhoea and Enteritis, - - - - -	—	1	1	1	1	4
Other Digestive Diseases, - - - - -	1	—	—	—	—	1
Congenital Malformation, - - - - -	—	1	—	—	—	1
Congenital Heart Disease, - - - - -	—	—	1	—	—	1
Premature Birth, - - - - -	6	7	1	—	—	14
Atrophy, Debility, and Marasmus, - - - - -	9	1	2	1	1	14
Atelectasis, - - - - -	—	—	—	—	—	—
Injury at Birth, - - - - -	—	—	—	—	—	—
Suffocation (overlying), - - - - -	—	—	—	—	—	—
Syphilis, - - - - -	—	—	—	—	—	—
All other causes, - - - - -	2	2	2	—	1	7
	19	14	16	7	8	64

Maternal Mortality.—Inquiry is now made into all deaths that occur within four weeks after confinement, with a view to ascertaining the cause of these deaths. With the exception of cases removed to hospital within the County, the first intimation of these deaths comes from the returns of the local Registrars.

3 maternal deaths occurred during the year, the causes of death being—puerperal septicæmia, 1; eclampsia, post-partum, 1; child-birth, pulmonary embolism, 1.

1 of these deaths occurred in hospital and 2 at home.

Puerperal Sepsis.—4 cases were notified during the year by the medical practitioner in attendance, and were as follows:—

- (1) M. 25 years. Confinement natural. Slight rigor with elevation of temperature two days after confinement. Removed to County Hospital, Motherwell.
- (2) M. 25 years. Confinement natural. Elevation of temperature three days after confinement. Lochia offensive. Removed to County Hospital, Motherwell.
- (3) M. 34 years. Confinement natural. Elevation of temperature three days after confinement. Lochia offensive. Removed to County Hospital, Motherwell.
- (4) M. 42 years. Difficult labour. Rigor and elevation of temperature one day after confinement. Child still-born.

Hospital Admissions.—Of the four cases notified, 3 were removed to hospital.

Deaths.—Of the 4 cases notified, 1 death occurred at home nine days after confinement, the certified cause of death being puerperal septicæmia.

The following statement shows the cases of puerperal sepsis and deaths during the past seven years.

Year.	Cases notified.	Cases per 1,000 births.	Deaths.	Deaths per 1,000 births.
1921,	—	—	—	—
1922.	1	·9	—	—
1923,	1	·8	—	—
1924.	3	2·6	3	2·6
1925,	5	4·8	1	·9
1926,	5	5·0	3	3·0
1927,	4	4·3	1	1·0

Ophthalmia Neonatorum.—During the year 3 cases were notified by the medical practitioners in attendance. Visits were made by the Nurse Health Visitors, and the cases classified as mild. All cases made complete recoveries with no impairment to vision. 1 case was admitted to hospital owing to the inability of the parents to look after the child properly.

Measles and Whooping-Cough.—Under this scheme partial notification of these diseases is in force in the district.

Measles.—In all, 208 cases came to the knowledge of the Department during the year. Of these, 80 cases were notified by the medical attendant, the remainder being notified by the nursing staff and from schools. Of the total 208 cases, 125 were under 5 years of age, the age incidence of the cases being given under the heading of non-notifiable diseases.

Deaths.—In all 3 deaths occurred, all deaths occurring at home, 2 being under 5 years of age. The age period is also given under the heading of non-notifiable diseases. The ultimate cause of deaths in the two cases was (1) pneumonia ; (2) broncho-pneumonia.

Hospital Admission.—1 case of measles, owing to the severity of the disease, was admitted to the County Hospital, Motherwell.

Whooping-Cough.—In all, 138 cases came to the knowledge of the Department during the year. Of these, 52 were notified under the scheme by the medical attendant, the remainder being notified by the nursing staff and from schools. Of the total 138 cases, 95 were under 5 years of age. The age incidence of the cases is given under the heading of non-notifiable diseases.

Deaths.—In all, 3 deaths occurred. All were under 5 years of age, and occurred at home. The age period of death is given under the heading of non-notifiable diseases.

Hospital admissions.—2 cases of whooping-cough, on account of their severity, were admitted to the County Hospital, Motherwell.

Hospital Accommodation for Measles and Whooping-Cough.—Arrangements are in force whereby severe cases, or cases where the

home conditions are not satisfactory, can be admitted to the County Hospital, Motherwell. Under the first category 1 case of whooping-cough and 1 case of measles was admitted to hospital, while under the second category 1 case of whooping-cough was admitted.

Home Visitation.—The visits made under this scheme, excluding the two burghs which are given later, numbered 8,156, of which 720 were first visits, 6,956 subsequent visits, and 480 special visits. Of these visits, 533 first visits and 5,586 subsequent visits and 433 special visits were made by the Nurse Health Visitors. The visits made by the District Nurses numbered 187 first visits, 1,370 subsequent visits, and 47 special visits, giving a total of 720 first visits, 6,956 subsequent visits, and 480 special visits. Special visits included—expectant mothers, 138; whooping-cough, 89; measles, 176; other visits, 77.

The total visits, including the two burghs, were as follows:—815 first visits, 7,928 subsequent visits, and 598 special visits, giving a total of 9,341 visits paid under this scheme.

Child Welfare Centres.—The attendances and consultations at the four Child Welfare Centres were as follows:—

	Mothers.	Babies and Children.	Consultations.
Lanark, - -	862	1,045	82
Carluke, . -	1,027	1,173	98
Coalburn, - -	292	327	43
Douglas Water, -	393	518	23

Necessitous Cases.—Following the practice of last year, an effort has been made to classify those receiving assistance according to their medical condition. The number show a definite decrease from last year, and are made up as follows:—Expectant mothers, 39; nursing mothers, 84; children under 1 year, 104; children under 5 years, 101.

	Mothers.		Children.		Total.
	<i>Expec.</i>	<i>Nurs.</i>	-1	-5	
Debility, - - - -	28	35	25	28	116
Inability to Nurse, - - - -	—	30	—	—	30
Loss of Weight, - - - -	—	—	30	19	49
Malnutrition, - - - -	—	—	9	5	14
<i>Infectious Diseases (debility following)—</i>					
Measles, - - - -	—	—	—	4	4
Whooping-Cough, - - - -	—	—	2	7	9
Influenza, - - - -	—	2	—	2	4
Pneumonia, - - - -	—	—	—	—	—
<i>Respiratory Diseases—</i>					
Pneumonia, - - - -	—	1	5	5	11
Bronchitis, - - - -	—	—	7	11	18
<i>Digestive Diseases—</i>					
Gastritis, - - - -	—	—	11	1	12
Gastro-Enteritis, - - - -	—	—	1	2	3
<i>Diseases connected with Pregnancy—</i>					
Pernicious Vomiting, - - - -	2	—	—	—	2
Phlebitis, - - - -	—	1	—	—	1
Post-partum hæmorrhage, - - - -	—	1	—	—	1
Suppurating Breasts, - - - -	—	1	—	—	1
Still-birth, - - - -	2	—	—	—	2
<i>General Diseases—</i>					
Anæmia, - - - -	5	11	—	2	18
Rickets, - - - -	—	—	3	13	16
Nephritis, - - - -	2	1	—	—	3
Jaundice, - - - -	—	—	—	1	1
Convulsions, - - - -	—	—	3	—	3
Infantile Paralysis, - - - -	—	—	—	1	1
Boils, - - - -	—	1	—	—	1
Herpes Zoster, - - - -	—	—	1	—	1
Adenitis, - - - -	—	—	1	—	1
Congenital nævus, - - - -	—	—	1	—	1
„ Hernia, - - - -	—	—	2	—	2
Intussusception, - - - -	—	—	1	—	1
Cleft palate, - - - -	—	—	2	—	2
Total, - - - -	39	84	104	101	328

Ultra-violet Ray Therapy.—During the year a K.B.B. mercury vapour lamp was installed at the Lanark Centre under the Maternity and Child Welfare Scheme. Though the period of use of the lamp has been too short as yet to give definite and comprehensive results, the following conclusions have been noted as to the reaction of several conditions to the treatment.

Administration of cod liver oil was carried out during each child's treatment, and it was noted that in cases of badly nourished children of poor muscular tone, the best results were obtained with short exposures at a distance of three feet. This was especially noticeable in the gain in weight. The treatment was usually begun by giving two minutes exposure back and front. All the children who were in a debilitated state of health appear to benefit greatly in a short time, and certainly appear happier and healthier children. The following cases are given as illustrative:—

- (1) Debility. Child of 1 year 7 months. Weight had been stationery for about 9 months—18 lbs. 12 ozs. Not able to creep or stand. After the sixth exposure child began to creep, and after the tenth exposure was able to stand, and after the fourteenth exposure was walking. Weight had increased then to 20 lbs.
- (2) Marasmus. Child of 1 year 4 months. Very pale, backward child of very poor muscular tone. Not able to sit. After the fourth exposure was able to sit, and after the eighth exposure was creeping, while after the eleventh was able to stand at a chair. Mother discontinued attendance.
- (3) Rickets. Child of $1\frac{1}{2}$ years. Weight 12 lbs. 12 ozs. No teeth. Not able to sit. Poor general condition. Gain in weight was steady each week, and child able to sit after seventh exposure. Teeth were appearing in upper jaw at tenth exposure and in lower jaw at fifteenth exposure. Able to stand at chair after twenty-second exposure, weight being 16 lbs. 13 ozs. Case still under treatment.
- (4) Malnutrition. Child of 10 months. General development poor, poor muscular tone. Nervous. Not able to sit. Weight 13 lbs. 8 ozs. Increase in weight was steady. After first exposure 14 lbs. 2 ozs. After fifth exposure 15 lbs. 8 ozs. After seventh exposure 16 lbs. Child still continuing treatment.

- (5) *Impetigo*. Child of 1 year. This was a case of apparently very intractable impetigo of face. The whole gamut of local applications had been gone through, but with no improvement taking place. The crusts were removed before treatment, and the sores cleaned and dried. Exposure was given at a distance of $2\frac{1}{2}$ feet for two minutes each treatment. After the fourth exposure the condition was healed and completely cured.

Hospital Admissions.—During the year there were 48 admissions to the County Maternity Hospital, Bellshill, which were as follows:—Normal confinements, 30; abnormal confinements, 6; illness connected with pregnancy, 11. Children under 5 years, 1 (gastritis). While some normal confinements were admitted on account of housing conditions, others were admitted as emergency cases sent in by the medical attendant, the birth taking place naturally in hospital.

To the County Hospital, Motherwell, there were 8 admissions under the scheme—puerperal sepsis, 3. Children under 5 years, 5—whooping-cough, 2; measles, 1; ophthalmia neonatorum, 1; respiratory obstruction, 1.

To the County Convalescent Home, Calderbank House, Baillieston, there were 2 admissions of illness connected with pregnancy.

To the County Hospital, Blantyre, there was 1 admission—child under 5 years, 1 (marasmus).

Burgh of Lanark.—The number of births in the burgh, after correction for transfers, amounted to 127, of which 7 were illegitimate, giving a birth-rate of 20·1 per 1,000 of the population. The attendants at birth will be found in Table E, which also gives the number of births notified and the visits made by the Nurse Health Visitor.

Infantile Mortality.—The deaths of infants under 1 year numbered 6, giving an infantile mortality rate of 47·2 per 1,000 births. The causes of death were—premature birth, 2; debility, 3; gastro-enteritis, 1.

Ophthalmia Neonatorum.—1 case was notified during the year. This case was classified as mild, and made a good recovery, with no impairment to vision.

Hospital Admissions.—During the year 24 cases were admitted to hospital:—County Maternity Hospital, Bellshill, 21—normal cases of confinement, 12; abnormal cases of confinement, 2; illness connected with pregnancy, 7. County Convalescent Home, Calderbank House, Baillieston—children under 5 years, 2 (gastro-enteritis, 1; removal of tonsils, 1). County Hospital, Blantyre—child under 5 years, 1 (marasmus).

Necessitous Cases.—The cases receiving assistance during the year numbered 56. These were as follows:—Expectant mothers, 7; nursing mothers, 19; children under 1 year, 17; children under 5 years, 13.

Burgh of Biggar.—The number of births, after correction for transfers, amounted to 16—males, 8; females, 8, giving a birth-rate of 10·4 per 1,000 of the population. Of these births, 1 was illegitimate.

The notifications of birth and the attendants at birth, as well as the visits made by the Nurse Health Visitor, will be found in Table E.

Infantile Mortality.—There was 1 death under 1 year, giving an infantile mortality rate of 62·5 per 1,000 births. The certified cause of death was premature birth.

Hospital Admissions.—There were no admissions to the hospital.

Ophthalmia Neonatorum.—No cases were notified.

Necessitous Cases.—Nil.

GENERAL SANITATION.

In the report of the District Sanitary Inspector, which is incorporated, will be found an account of the work done under the headings “Housing,” “Water Supply,” “Drainage and Sewage Disposal,” “Scavenging,” “Nuisances,” “Tents, Vans, and Sheds,” “Workshops,” “Sanitary Condition of Dairies, Cowsheds, and Milkshops, &c.”

Milk (Special Designations) Order (Scotland), 1923.—At the end of the year there were 25 producers in possession of a licence from the Local Authority to sell the various grades of milk under the above Order. These are as follows:—Certified milk, 9; Grade A (TT), 14; Grade A, 2. There is little difficulty of disposing of the supply, but most of it is sent out of the district, with the exception of a certain amount retailed in the Biggar, Lanark, and Carluke areas.

The following were the licences held during the year :—

Grade of Licence.	Name and Address of Licensee.
Certified	Andrew Murdoch, Teaths, Lesmahagow.
Do.	John Russell, Walston Mansions, Dunsyre.
Do.	John Fairie, Littlegill, Auchenheath.
Do.	James G. Gilchrist, Auchtygemmel, Lesmahagow.
Do.	Lindsay Steele, Blackhill, Lesmahagow.
Do.	Harry Roscoe, Boghead, Crawford.
Do.	J. & T. Blackwood, Hill of Kilncadzow, Carluke.
Do.	James Hodge, Brownhill, Carnwath.
Do.	James A. Brown, Cormiston Towers, Biggar.
Grade A (T.T.)	T. B. M'Gregor, Lesserlinn, Lanark.
Bottler's Licence	
Grade A (T.T.)	Gavin Hamilton, Auldtoun, Lesmahagow.
Do.	John Kirkwood, Scorrieholm, Lesmahagow.
Do.	Samuel A. Ballantyne, Eastwood, Lesmahagow.
Do.	Right Hon. Earl of Home, Newmains, Douglas.
Do.	T. & W. Ballantyne, Woods, Auchenheath.
Do.	Hugh Stewart, Southfield, Kirkmuirhill.
Do.	James Barr, Whiteshaw, Carluke.
Do.	Hugh C. Brown, Birkwood Mains, Lesmahagow.
Do.	John Struthers, Anston, Dunsyre.
Do.	R. & W. Wallace, Linnhead, Lesmahagow.
Do.	Walter Adamson, Harleyholm, Carmichael.
Do.	John Cadzow, Craighead, Carluke.
Do.	Gavin Watson, Hillend, Lesmahagow.
Grade A	James Barrie, Mossplatt, Carstairs.
Bottler's Licence	
Grade A	Archibald Affleck, Barnhills, Douglas Water.

The following table shows the bacterial content of the samples taken during the year :—

Blood Heat Organisms per c.c.	Certified.	Grade A (T.T.)	Grade A.
Under 1,000 - -	9	—	—
„ 2,500 - -	16	11	2
„ 5,000 - -	18	16	2
„ 10,000 - -	7	19	1
„ 20,000 - -	3	19	1
„ 30,000 - -	1	5	1
„ 50,000 - -	—	2	—
„ 75,000 - -	—	1	—
„ 100,000 - -	—	—	—
„ 150,000 - -	—	—	—
„ 200,000 - -	—	—	—
Over 200,000 - -	1	1	—
	55	74	7
Coliform Bacilli present in			
One-tenth of a c.c.	8	—	—
One-hundredth of a c.c.	—	6	—

Certified Milk.—On only one occasion was the bacterial content found to be above the standard. The vendor was cautioned, and further samples taken showed that a considerable improvement had taken place.

Eight samples were found to contain coliform bacilli in one-tenth of a c.c. These samples were taken from six different vendors, and on instructions being given that more care should be taken with the milking methods, subsequent sampling carried out gave satisfactory results.

Grade A (Tuberculin Tested).—On only one occasion was the bacterial content found to be above the standard, and on six occasions coliform bacilli were found present in one-hundredth of a c.c. Two of these samples were taken in connection with an application for a licence. The producer in this case was instructed as to the methods to be adopted and the care to be taken to avoid contamination. Thereafter further samples were taken which gave satisfactory results, and a licence was duly granted. The other four samples containing coliform bacilli were taken from three different licence-holders.

Chemical Analyses.—The following table shows the milk fat per cent. and the milk solids other than milk fat per cent. in the samples taken throughout the year :—

Milk Fat per cent.	Certified	Grade A (T.T.)	Grade A	Non-fatty solids per cent.	Certified	Grade A (T.T.)	Grade A
3.2	—	1	—	8.2	—	—	—
3.3	1	—	—	8.3	—	—	—
3.4	4	6	—	8.4	—	—	—
3.5	2	2	1	8.5	—	—	—
3.6	4	—	—	8.6	—	3	—
3.7	5	4	—	8.7	3	4	—
3.8	6	7	1	8.8	4	5	—
3.9	5	9	1	8.9	11	7	3
4.0	10	13	2	9.0	8	15	1
4.1	3	5	—	9.1	7	11	—
4.2	5	6	2	9.2	10	10	2
4.3	4	7	—	9.3	5	7	—
4.4	1	8	—	9.4	4	9	1
4.5	3	2	—	9.5	1	2	—
Over 4.5	2	4	—	Over 9.5	2	1	—
—	55	74	7	—	55	74	7

Milk Fat.—Five samples of certified milk were found not to comply with the standard of 3·5 per cent. of milk fat, these samples being from three different producers.

Seven samples of Grade A (TT) milk were also found not to comply with the standard of milk fat of 3·5 per cent., these samples being taken from six different producers.

A warning letter was sent to the vendors concerned, and subsequent sampling showed that the standard was being complied with.

Sixty-six of the samples taken, or 48 per cent., contained 4·0 per cent. or over of milk fat.

Veterinary Inspection of Dairy Herds.

The prevalence of tuberculosis of the udder among dairy stock is detailed in the following table which shows the work done in the Upper Ward during the year. Samples of milk are drawn from all udders which, upon examination, showed a suspicious condition. 336 samples of milk were taken in this way and sent to the County Laboratory for examination, when 24 were found to contain tubercle bacilli. In these cases, certificates were granted by the County Veterinary Surgeon, stating that the animal suffered from tuberculosis of the udder, the animal being thereafter slaughtered under the Tuberculosis Order.

Under the Milk and Dairies (Scotland) Act, 1914, which came into force on 1st September, 1925, it is an offence to sell milk from a cow suffering from any disease liable to infect or contaminate the milk. Samples of milk are therefore taken in any case where a suspicious condition of the udder is noted. If, on examination in the laboratory, any samples are found to contain the streptococcus of mammitis or other infective organisms, a letter is sent to the owner of the animal pointing out that it is an offence to sell the milk from such a cow for human consumption, and asking him what he is doing to comply with the statute. During the year 67 such letters were sent.

UPPER WARD DISTRICT.
VETERINARY INSPECTION OF DAIRY HERDS.—YEAR 1927.

Parish	Herds Registered	Herds Inspected	Cows Inspected	Cows with Abnormal Condition of Udder						Samples of Milk			
				Tubercle	Atrophy	Mammitis	Induration N.T.	Eruption on Teats	Totals	Number taken	Number found to contain Tubercle	Number found to contain Infectious Organisms	Number Negative
Biggar,	22	27	537	2	14	1	7	...	24	22	2	1	19
Carluke,	78	86	1,377	4	34	10	12	5	63	71	4	11	56
Carmichael,	24	30	574	2	21	2	9	...	34	11	3	2	6
Carnwath,	88	112	2,071	2	57	11	12	...	82	44	2	12	30
Carstairs,	24	26	702	1	21	5	8	1	36	24	...	6	18
Covington	14	16	274	...	8	1	3	2	14	7	1	...	6
Crawford,	11	25	169	...	3	...	...	...	3	...	...	...	...
Crawfordjohn,	19	23	338	...	8	1	4	...	13	8	...	...	8
Coulter,	8	16	100	...	1	...	...	...	1	...	...	...	...
Dolphinton,	16	19	213	...	2	...	2	...	4	2	...	...	2
Douglas,	18	31	404	2	7	5	3	1	17	9	2	3	4
Dunsyre,	7	8	164	...	3	...	2	...	5	2	...	...	2
Lamington,	7	11	92	...	2	...	...	...	2	...	...	...	...
Lanark,	24	31	546	3	23	2	7	11	45	22	3	3	16
Lesmahagow,	163	211	4,210	4	148	22	54	5	233	89	4	26	59
Libberton,	21	30	695	...	27	3	5	4	39	9	...	...	9
Pettinain,	13	18	314	...	10	...	2	...	12	1	...	...	1
Symington,	15	19	154	3	6	...	2	...	10	10	2	3	5
Walston,	21	28	331	...	3	...	...	...	3	...	...	...	...
Wiston, &c.,	17	22	300	1	5	...	2	...	8	5	1	...	4
<hr/>													
Totals for													
Upper Ward,	610	789	13,565	24	403	63	134*	29	648	336	24	67†	245

* Includes cases of suspected Tubercle which proved negative.

† These samples were taken from 63 cows.

Public and Private Slaughter-houses.

There are in the Upper Ward District 4 public and 7 private slaughter-houses, the latter including a large sheepery.

The public abattoirs are situated in Carluke, Douglas, Forth, and Lesmahagow, and the private slaughter-houses in the following areas:— Abington, Carnwath, Carstairs Junction, Crawford, Douglas Water, Leadhills, and Symington.

All the slaughter-houses within the district were regularly visited and, with few exceptions, were conducted in accordance with the By-laws.

The following tables give a record of (a) the animals killed and dues, &c., collected; and (b) the carcasses totally destroyed or partially condemned during the year in the various public abattoirs:—

1927.

RECORD OF ANIMALS KILLED.

Abattoir	Bulls	Bullocks	Cows	Heifers	Calves	Sheep	Swine	Totals	£	s.	d.
Carluke, - -	42	455	100	216	3,026	865	2,988	7,692	850	11	8
Douglas, - -	...	114	...	26	...	241	13	394	271	19	6
Forth, - - -	...	109	...	181	...	244	82	616	28	6	8
Lesmahagow.	61	334	217	95	2	659	180	1,548	57	2	4
Totals, -	103	1,012	317	518	3,028	2,009	3,263	10,250	£1,208	0	2

1927.

RECORD OF CARCASSES TOTALLY OR PARTIALLY CONDEMNED.

Abattoir	CATTLE.				CALVES.			SHEEP.			SWINE.			
	Complete Carcases	Part Carcases	Heads	Internal Organs	Complete Carcases	Heads	Internal Organs	Complete Carcases	Heads	Internal Organs	Complete Carcases	Part Carcases	Heads	Internal Organs
Carluke, -	63	19	11	113	6	...	11	4	4	15	2	1	87	67
Douglas, -	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Forth, -	3	1	...	4	...	...	...	...	...	...	...	...	...	2
Lesmahagow.	12	27	11	62	2	1	...	1	...	9	1	...	3	6
Totals, -	79	47	22	179	8	1	11	5	4	24	3	1	90	75

The following table gives a record of the animals slaughtered at the undermentioned private slaughter-houses :—

1927.

RECORD OF ANIMALS KILLED.

Slaughter-house	Bulls	Bullocks	Heifers	Cows	Calves	Sheep	Swine	Totals
Abington, - - -	...	52	27	...	4	211	27	321
Carnwath, - - -	...	103	...	...	...	150	...	253
Carstairs Junction,	151	...	...	...	236	19	406
Crawford, - - -	...	63	...	...	...	209	1	273
Douglas Water, -	95	6	...	...	167	4	272
Leadhills, - - -	...	4	42	9	6	155	...	216
Totals, - - -	...	468	75	9	10	1,128	51	1,741

CONDEMNATIONS.

Abington, - - -	1 Heifer (head and lungs condemned).
Do., - - -	1 Heifer (liver condemned).
Carnwath, - - -	1 Cow (totally condemned).
Do., - - -	Oxen, 2 livers.
Do., - - -	Ox, one fore quarter and internal organs condemned.
Carstairs Junction, -	Oxen, 2 partially condemned.

OFFENSIVE TRADES.

Two businesses are conducted under this category in the Upper Ward District. These are (1) knacker's yard at Whitelees, Lanark; and (2) bone-degreasing plant at Braidwood.

No complaints were received during the year in respect of either business.

Report of the Sanitary Inspector.

HOUSING.

Building By-Laws.—During the year 51 sets of plans were lodged in accordance with the requirements of the building by-laws. These plans related to new buildings and alterations and additions to existing properties.

The plans, together with the relative schedules of information thereon, were examined, reported upon, and submitted to the Public Health Committee. The tabular statement appended shows the nature of the plans dealt with under the by-laws.

In all, 253 inspections were made of new buildings, and 60 smoke-tests were applied to drainage systems. In addition to these a number of smoke-tests were applied to drains of existing buildings.

In addition to the houses erected by the District Committee under their housing schemes, which are referred to later, 31 houses were provided by private enterprise during the year, particulars of which are as follows:—

Bungalow of 6 apartments, scullery, bathroom, etc., at West Avenue, Carlisle.

Bungalow of 5 apartments, scullery and bathroom, at Loch Road, Lanark.

Cottage of 3 apartments, scullery, water-closet, at Loch Road, Lanark.

Cottage of 6 apartments, scullery, bathroom, etc., at John Street, Biggar.

Cottage of 5 apartments, scullery, bathroom, etc., at Carwood Policies, Biggar.

Bungalow of 6 apartments, scullery, bathroom, etc., at Stevenston Street, Carlisle.

Temporary cottage of 3 apartments at Main Street, Crossford.

Two cottages of 2 apartments, with sculleries, etc., at Elvanfoot.

In addition to the above the following 22 houses were erected under the subsidy schemes:—(a) Housing, 1923 (Subsidised Scheme), £82 10s.; (b) Housing (Financial Provisions) Act, 1924, £12 10s. per annum for 40 years.

(a) Bungalow of 4 apartments, scullery, bathroom, etc., at Pettinain Road, Carstairs Junction.

Cottage of 4 apartments, scullery, bathroom, etc., at Edmonston, Biggar.

PARISH.	No. of Plans.				New Houses and Apartments.				Apartments added to Existing Houses.								
	Submitted	Passed	Rejected	Not proceeded with	Passed subject to alterations	Two	Three	Four	Five and Upwards	Total	One	Two	Three	Four	Five and Upwards	Total	Bathrooms, Sculleries, &c.
Biggar,	5	5	...	...	...	...	12	1	2	15	...	...	...	...	...	...	...
Carlisle,	12	12	...	2	...	8	4	1	2	15	...	...	...	...	...	...	...
Carnwath,	9	9	...	1	1	5	6	...	...	11	...	2	1	...	...	3	...
Carstairs,	5	5	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...
Covington, &c.,	2	2	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...
Crawford,	4	4	...	...	...	2	...	...	1	3	...	...	...	...	1	1	5
Crawfordjohn,	2	2	...	...	...	...	...	...	...	...	...	...	3	...	...	3	...
Lamington, &c.,	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lanark,	4	4	...	...	...	...	1	...	2	3	...	...	...	...	...	...	...
Lesmahagow,	3	3	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...
Symington,	4	4	...	...	...	4	4	1	...	9	...	...	...	...	...	...	...
Total.	51	51	...	4	2	19	28	4	10	61	...	2	4	...	1	7	5

Cottage of 4 apartments, scullery, bathroom, etc., at Symington.

Two cottages of 3 apartments, sculleries, bathrooms, etc., each, at District Hospital, Carluke.

Two cottages of 3 apartments, sculleries, bathrooms, etc., each, at Braidwood House, Carluke.

Cottage of 5 apartments, scullery, bathroom, etc., at New Lanark Road, Lanark.

Bungalow of 4 apartments, scullery, bathroom, etc., at Douglas Street, Carluke.

Two houses (semi-detached bungalow type) of 4 rooms, kitchenette, and bathroom each, at Perryflatts Road, Thankerton.

Bungalow of 4 apartments, kitchenette, bathroom, etc., at Perryflatts Road, Thankerton.

(b) Erection of 8 houses (4 of 3 apartments and 4 of 2 apartments) at New Colliery, Climpy, for the Coltness Iron Company, Limited.

Two houses (each of 3 apartments), back-kitchen, larder, etc., on main road between Headless Cross and Forth (Parish of Carnwath), for the Coltness Iron Company, Limited.

Other plans submitted related to alterations and additions to existing buildings, etc., among which were the following:—

Boarding-house of 3 public rooms, 13 bedrooms, bathrooms, etc., at Crawford; conversion of stable into garage at Biggar; erection of temporary garage at Lesmahagow; billiard hall at Forth; public hall and retiring rooms at Lamington; additions to garage, Carluk; addition to Co-operative Society's premises at Carstairs Junction; addition to public hall, Crawford, of 2 retiring rooms; erection of shops and offices at Forth; erection of tomato houses, etc., at Symington; erection of picture house, hall, cloakrooms, etc., at Carluk; addition of boilerhouse and milkhouse, Carluk; erection of new dairy-byre at Carstairs; joiner's shop and garage at Symington; erection of mission hall at Carstairs Junction; additions to Public Hall, Abington, of two retiring rooms and sanitary conveniences; addition of wing to existing hotel at Crawford, comprising 2 public rooms, 8 bedrooms, with bathrooms and lavatories; erection of fish restaurant at Forth; alterations and additions to existing west pavilion at Bellefield Sanatorium, Lanark; erection of two garages at Carluk.

State-Aided Housing Schemes.—The appended table shows the progress of the various housing schemes completed or being undertaken by the District Committee under the subsidy schemes approved by the Scottish Board of Health:—

NOTE OF HOUSES BUILT AND PROPOSED TO BE BUILT BY THE DISTRICT COMMITTEE
UNDER THE VARIOUS SCHEMES.

Situation.	Houses Built under Addison (1919) Scheme.	Houses built under Scheme for Improve- ment of Insanitary Areas	Houses built under Chamber- lain (1923) Scheme.	Houses built under Housing (Finan- cial Pro- visions) Act, 1924.	Houses in course of erection under the Housing (Financial Provisions) Act, 1924.			Total Number of Houses Built or in course of Erection.
					2 Apart.	3 Apart.	4 Apart.	
Auchenheath, -	20	...	...	...	...	...	...	20
Blackwood, -	52	...	...	...	12	4	...	68
Coalburn, -	84	32	...	12	...	...	...	128
Lesmahagow, -	106	...	...	...	24	16	...	146
Douglas, -	44	...	...	12	...	...	...	56
Ponfeigh and Rigside, -	42	...	24	...	28	12	4	110
Forth, -	58	40	...	...	36	4	...	138
Carlisle, -	102	28	...	104	28	20	8	290
Law, -	46	...	...	16	12	4	...	78
Carstairs, -	14	...	...	12	8	4	...	38
Carstairs Junction, -	50	...	...	20	20	12	...	102
Carnwath, -	...	...	12	16	4	4	...	36
Kirkfieldbank, -	...	...	...	8	...	...	...	8
Pettinain, -	...	...	...	8	...	...	...	8
Thankerton, -	...	...	...	8	...	...	...	8
Crawford, -	...	...	...	8	...	...	...	8
Glespin, -	...	...	...	12	...	4	...	16
Abington, -	...	...	...	...	...	6	...	6
Braidwood, -	...	...	...	...	8	...	...	8
Biggar, -	...	...	...	...	...	12	...	12
Symington, -	...	...	...	...	4	4	...	8
Totals, -	618	100	36	236	184	106	12	1,292

Housing (Inspection of District) Regulations, 1910.—The number of houses inspected during the year was 1,851. Of this number 55 were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation.

Seven representations relating to 55 houses were made to the Local Authority with a view to the making of Closing Orders.

The number of dwelling-houses in respect of which Closing Orders were made was 55.

Twenty dwelling-houses, the defects in which were remedied without either the making of Closing Orders or the serving of notices under Section 3 (1) Housing (Scotland) Act, 1925, were dealt with.

Two dwelling-houses were made into a fit state for habitation after the making of Closing Orders.

Housing (Scotland) Act, 1925.—The number of cases where intimations were given under Section 20 (1) as to insufficient water-closest accommodation—

(a) Cases where requirement complied with by owners, 40 (81 water-closets);

(b) Cases where works carried out by Local Authority after failure of owners to do so, nil;

(c) Cases still pending, 2.

Eighteen houses of 2 apartments were erected with the consent of the Local Authority during the year—12 by the District Committee and 6 by private enterprise.

Housing—Improvement of Insanitary Areas Scheme.—The following table shows the progress made as at 31st December, 1927, with the closure and demolition of houses in the years, 1925, 1926, and 1927.

	Number of Houses in respect of which Orders made			Number of Houses Vacated			Number still Occupied	Number of Houses Demolished	Number of Houses Reconstructed	
	1925	1926	1927	1925	1926	1927				
<i>Parish of Carluke.</i>										
5 Clyde Street, - - -	1	...	...	1	...	...	...	1	...
Leather Row, - - -	6	...	...	6	...	...	...	6	...
9-45 Kirkton Street, - -	4	..	...	4	...	...	...	...	4 as 1
6-70 Chapel Street, - -	3	...	...	1	...	1	...	...	...
2-86 Chapel Street, - -	3	...	...	2	...	1	...	...	...
19-123 Carnwath Road, -	3	...	...	3	...	...	...	...	...
Engine Row, - - -	7	...	...	7	...	...	...	7	...
Old Mauldslie Road, Law,	2	...	...	2	...	...	...	2	...
Houses at Braidwood, - -	...	...	4	...	...	2	...	...	...
Single house at Braidwood,	...	...	1	...	...	...	1	...	...
<i>Parish of Carnwath.</i>										
Laywood, - - -	55	...	...	20	26	6	...	52	3
Bank Row, Forth, - - -	6	...	...	5	...	1	...	6	...
<i>Parish of Carstairs.</i>										
Maininghead, - - -	...	1	...	...	1	...	...	...	...
<i>Parish of Douglas.</i>										
New Row, Rigside, - - -	...	10	...	...	...	...	10	...	...
Core Row, Rigside, - - -	...	...	2	...	...	...	2	...	...
Overton Cottage, - - -	...	...	1	...	...	...	1	...	...
<i>Parish of Lesmahagow.</i>										
Auchenbegg Row, Coalburn, -	6	...	...	6	...	...	...	6	...
Bankend Row, Coalburn, -	41	...	...	9	10	15	7	34	...
Lawdust Row, Coalburn, -	4	...	...	...	...	4	...	4	...
Brocketsbrae, - - -	6	...	...	6	...	...	...	6	...
Old Temperance Hotel, - -	5	...	...	5	...	...	...	...	5 as 1
Old Schoolhouse, Kirkfieldbank,	...	...	3	...	...	3	...	3	...
Littlegill Row, Auchenheath,	...	...	16	...	...	...	16	...	...
Longlea Terrace, do. - -	...	...	25	...	...	...	25	...	...
Engine Row, do. - - -	...	...	3	...	...	...	3	...	...
Downfoot Cottages, do. -	...	...	2	...	...	...	2	...	...
Total, - - -	152	11	57	77	37	33	67	127	12	
	220			147						

The two houses forming part of Store Row, Rigside, for which a representation was made during the year, have now been acquired by the Coltness Iron Company, Ltd., whose manager has given the Committee an undertaking to build an annexe to each house consisting of a scullery with water-closet, sink and coal-cellar accommodation, and also to put the houses into a condition reasonably fit for habitation. On this account the Closing Order has been deferred.

During the year the Committee resolved to take legal proceedings to have the remaining tenants evicted from the houses at Haywood, and Bankend, Coalburn, which were the subject of Closing Orders in 1925. The Sheriff-Substitute, in his Interlocutors, allowed the tenants fourteen days in which to appeal. On the expiry of the fourteen days without appeal being lodged, decrees were to be extracted to have the defenders ejected. The tenants of the Coalburn houses appealed to the Sheriff-Principal, who recalled the Sheriff-Substitute's Interlocutor on the technical ground that, under the terms of the Housing Act, it was not competent for the Sheriff to pronounce a decree of ejection, and that he was limited to pronouncing an order to quit, failure to obey which might be enforced by imprisonment of the person disobeying. Under the Interlocutor, the tenants had been ordained to remove within 14 days. The Sheriff-Principal found neither party entitled to expenses.

It will be noted from the preceding table that all the houses at Haywood have now been demolished, and only 7 occupied houses remain out of 41 previously closed at Bankend, Coalburn. The unoccupied houses have been demolished.

Housing (Scotland) Act, 1925, and Housing, Town Planning, &c. (Scotland) Act, 1919.—During the year under review much time was devoted to the inspection of properties for the purpose of obtaining information for the making of Closing Orders, but the question of providing water-closets, sinks, etc., to existing houses was not neglected, as will be seen from the detailed statement of sanitary conveniences introduced.

Special attention continues to be given to those areas which are special scavenging districts, where the dry conservancy system is still in existence, and particularly those areas where drainage facilities are available.

The sanitary conveniences provided at the instance of the Public Health Officials are detailed in the following tabular statement, and indicate that during the year 82 water-closets, besides a considerable number of baths, sinks, &c., were introduced to existing properties.

Parish.	Locality.		Number of Tenants.	Water-closets.	Baths.	Wash-hand Basins.	Sinks.	Sculleries.	Wash-houses.	Coal cellars.
Carmichael.	Netherton, - - -	-	1	1	1	1	...	...	...	...
	Carmichael Mill, - -	-	1	1	1	1	...	...	...	...
			2	2	2	2	...	...	...	...
Carluke,	Lawhill, - - -	-	4	2	...	...	...	...	...	...
	Station Road, Law,	-	1	1	1	1	...	..	...	...
	Lawhill Road, - -	-	1	1	...	..	...	...	...	...
	Do. - - -	-	1	1	1	1	...	...	...	...
	Do. - - -	-	1	1	...	1	...	...	...	...
	Law Public School, -	-	...	13	...	...	...	...	...	...
	Kirkton Street, - -	-	6	2	...	...	...	...	...	...
	Do. - - -	-	7	...	...	...	7	...	...	...
	Do. - - -	-	4	4	...	...	4	...	...	...
	Old Bridgend. - -	-	2	...	...	...	2	...	...	...
	Do. - - -	-	1	1	...	...	1	1	...	...
	Stewart Street, - -	-	1	...	...	...	1	...	...	...
	Carnwath Road, - -	-	6	3	...	...	...	...	...	...
	High Street, - - -	-	2	1	...	...	2	...	...	...
	Crawfordwalls, - -	-	1	1	1	1	...	...	...	...
	Sutherland Terrace, -	-	2	2	...	...	...	...	...	...
	Belstane Road, - -	-	1	1	...	...	1	...	...	...
			41	34	3	4	18	1	...	...
Carnwath,	Main Street, Carnwath, -	-	1	1	1	1	...	...	...	...
	Do. do. - - -	-	2	2	...	...	...	...	...	...
	Do. do. - - -	-	1	1	...	...	1	...	...	...
	Gasworks Cottage, - -	-	1	1	...	...	1	...	...	...
	Main Street, Forth, - -	-	1	1	1	1	1	...	...	...
	Do. do. - - -	-	3	1	...	...	...	...	...	...
	Do. do. - - -	-	7	2	...	...	...	...	1	...
			16	9	2	2	3	...	1	...
Carstairs,	Corbiehall Farm, - -	-	1	1	1	1	...	...	...	...
Coulter,	Coulter Park Farm, -	-	1	1	1	1	...	...	...	...
	Westfield Farm, - -	-	1	1	...	...	...	...	...	...
	Townfoot, - - -	-	1	1	1	1	...	...	...	...
			3	3	2	2	...	...	...	...
Crawford,	Gilkerscleugh, - - -	-	1	1	1	1	...	...	...	...
Crawfordjohn,	Glenbreck, Leadhills,	-	1	1	...	...	...	...	...	...
Lamington,	Lamington Village, -	-	1	1	...	...	...	...	...	...

Tabular Statement.—*Continued.*

Parish.	Locality.	Number of Tenants.	Water-closets.	Baths.	Wash-hand basins.	Sinks.	Sculleries.	Wash-houses.	Coal cellars.
Lesmahagow,	Burnfoot, Kirkmuirhill, -	2	2	...	...	...	...	...	...
	Coalburn Rows, -	6	6	...	...	6	6	...	6
	Do. -	12	6	...	...	...	...	...	...
	Rosewood, Blackwood, -	1	1	...	...	1	...	...	...
	Kirkmuirhill Cross, -	4	2	...	...	4	...	...	...
	Lintfieldbank, -	1	1	...	...	...	...	...	...
	Woodlands Terrace, Blackwood, -	1	1	...	...	...	...	...	...
	Lochanbank Farm, -	1	1	1	1	...	...	...	...
	Do. do. (outside), ...	1	1	...	...	...	...	...	...
	Woodlands Terrace, Blackwood, -	10	5	...	...	...	...	...	...
	Station Terrace, Coalburn, -	8	4	...	...	...	...	...	...
		46	30	1	1	11	6	...	6
Symington,	Brookside, - - -	1	1	...	...	...	...	...	...
	Upper Ward, - - -	113	83	12	13	32	7	1	6

To meet the requirements of the Board's circular of the 1st September, 1925, which called upon Sanitary Inspectors to survey the more populous areas in their districts to ascertain

- (1) The number of common water-closets in use, showing separately the number serving 2, 3, 4, and 5 or more tenants respectively;
- (2) The number of houses without water supply and sinks inside the house; and
- (3) the number of (a) dry closets, (b) privy-middens, and (c) ashpits, showing for each separately the number serving 2, 3, 4, and 5 or more tenants respectively.

As time permits this survey is being undertaken, and the details for the areas completed are appended herewith. The information for those areas not yet undertaken will be reported upon annually as the work is completed.

		Carlisle.	Ponfeigh.	Carstairs Village.	Kirkfieldbank.	Carnwath.	Carstairs Junction.	Law
No. of Occupied houses,	-	1,484	258	134	210	231	274	393
Water closets—								
1 for each house,	-	801	255	70	40	156	194	139
Common to 2 tenants,	-	156	...	14	6	1	28	12
Do. 3 do.	-	36	...	8	2	6	...	3
Do. 4 do.	-	21	...	1	4	...	...	...
Do. 5 tenants and over,	3	...	...	...	1	...	...	...
No. of houses without water								
supply or sinks inside,	-	470	...	59	120	64	2	143
No. of houses with water supply								
and sink inside,	-	1,014	258	75	90	167	272	250
No. of houses with baths,	-	368	91	43	17	79	110	98
Privy-middens—								
1 for each house,	-	59	3	7	76	31	...	100
Common to 2 tenants,	-	32	...	...	7	3	...	7
Do. 3 do.	-	6	...	...	6	5	...	9
Do. 4 do.	-	9	...	...	4	...	...	15
Do. 5 tenants and over,	7	...	...	...	1	...	...	4
Totals—								
Common water-closets,	-	216	...	23	13	7	28	15
Do. privy-middens,	-	54	...	...	18	6	...	35

Sufficiency of Working-Class Dwellings.—In the month of December a Memorandum was submitted by the Medical Officer of Health with regard to the further housing requirements of the Upper Ward District. The following is an extract from this report:—

“Recently I have made an inspection of various localities in the Upper Ward District, accompanied by the District Sanitary Inspector. I noted that in certain localities there were a number of empty houses at the time of inspection, particularly at Tarbrax, Coalburn, Lesmahagow, Blackwood, and Carlisle. In some of these districts houses are also in course of erection, and will be ready for occupation shortly.

“The population of the Upper Ward District at the Census, 1921, was 46,701. According to the Police Census, 1927, the population is 44,500, but my own estimate of the population in the Upper Ward District at the present time, which is based on the number of occupied houses, is 48,000. From this it is apparent that there is very little increase in population.

“Since the year 1919, the houses built or being built by the Upper Ward District Committee amount to 1,272, equal to over 12 per cent. of the total houses in the district.”

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CONCLUSIONS.

“It would appear that the housing shortage in the Upper Ward District has been met, with the exception that more houses may be necessary in such places as Carstairs Parish and Carmichael Parish. Before embarking on any further building schemes, however, it would be well to see the effect of the occupation of the houses which are presently in course of erection. Until these houses are occupied it is very difficult to estimate correctly the housing requirements in certain areas, as, no doubt, a considerable amount of decanting will take place, *i.e.*—‘A’ and ‘B’ are applicants for new houses; ‘A’ is presently resident in a two-apartment house but desires more accommodation, whereas ‘B,’ who is presently a sub-tenant or lodger, would be quite satisfied with the house presently occupied by ‘A.’

“The erection of houses for industrial concerns also affects the question. Before the present housing shortage it was always the practice for a colliery company, &c., to erect houses for their workers, but this practice appears to be in abeyance, and reliance is placed upon the District Committee providing the necessary houses. There is a serious financial risk on the part of the District Committee undertaking the erection of such houses, as the industrial concern may cease operating at any time, as, for example, at Tarbrax. Had the houses in this locality been provided by the Local Authority instead of by the Scottish Oils, Ltd., they would now have had to bear a serious financial loss.”

Reconstruction Schemes.—During the year the District Committee acquired the properties known as Tinto View and Railway Terrace, Coalburn, in the Parish of Lesmahagow, comprising in all 34 houses, each of 2 apartments and sculleries. These properties were erected by Messrs William Barr & Sons, coalmasters, about 36 years ago. On account of the closing down of Bellfield Colliery, the company had no further need for them, and as their condition did not warrant closure the Committee propose to execute necessary repairs and provide modern sanitary conveniences.

Overcrowding.—There is no overcrowding of a serious nature to report.

Housing (Rural Workers) Act, 1926.—The Committee formulated a scheme in terms of the above Act, and while two applications had been received at the close of the year these were not due to be dealt with until January, 1928.

WATER SUPPLY.

Special Water Supply Districts.

There are 16 special water supply districts in the Upper Ward, viz. :—

- | | |
|--|-----------------------------------|
| 1. * Blackwood. | 9. Forth. |
| 2. * Braidwood. | 10. * Kirkfieldbank. |
| 3. * Carluke. | 11. * Law. |
| 4. * Carnwath and Carstairs
Junction. | 12. * Lesmahagow and
Coalburn. |
| 5. * Carstairs Village. | 13. * Ponfeigh. |
| 6. * Crawford. | 14. Robertson. |
| 7. * Crossford and Hazelbank. | 15. Symington. |
| 8. Douglas. | 16. * Thankerton. |

The trunk mains which traverse the Upper Ward District, and belonging to the Motherwell and Wishaw Water Commissioners, the Airdrie and Coatbridge Water Commissioners, and the Middle Ward District Committee of the County of Lanark respectively, supply 12 of the above-mentioned districts either wholly or partially. Such districts are marked by an asterisk (*) in the above list.

Particulars of each district are as follows :—

Blackwood.—This district, which includes the villages of Blackwood, Kirkmuirhill, and Auchenheath, was originally supplied from springs on the lands of Starbirns, which proved sufficient for the immediate requirements of the district after its formation, but, as the District Committee intended to extend the boundaries so as to embrace the village of Auchenheath and surrounding properties, the Starbirns supply was augmented from the Middle Ward main (Dunside supply).

As the high colour of the Dunside supply was the subject of frequent complaint, the Committee took the earliest opportunity to abandon this supply in favour of that of the Camps main, which passes convenient to Kirkmuirhill village. This supply is ample and satisfactory in every respect.

Braidwood.—This district, since its formation, has obtained its whole supply from the Wishaw main which follows the Lanark road towards Carluke. At first a 3-inch branch pipe supplied the village, but in 1924, with the formation of Crossford and Hazelbank Special Water Supply District, this pipe was disconnected and supplanted by a 5-inch pipe, which is breeched to the former at two points in the

Braidwood district. The total consumpt for the two districts is recorded in a meter situated near Braidwood railway bridge, and a second meter is placed at the extremity of the Braidwood boundary. The latter reading, when deducted from the former, gives the consumpt for the respective districts.

Carluke.—Carluko was formed into a special water supply district about forty-five years ago, the supply being obtained from Springfield. About twenty years ago, owing to the increase in the population and the growth of the district generally, this supply became inadequate, and was supplemented from the Wishaw main.

During the summer of 1927 the Wishaw supply was cut of temporarily (for two days or so), and as there was a clamant demand for water in the district the local Committee made an arrangement with the Airdrie and Coatbridge Water Commissioners to take a connection from their main, not only to supply their immediate requirements, but to be in readiness for future cases of emergency. In all, 500,000 gallons have been used from this source, but the value of the connection is acknowledged in the event of fire, when a large quantity of water is drawn from the mains. By turning on this supply the pressure on the whole system is maintained.

The local supply from Springfield was the subject of complaint during the year, there being a great deal of sediment in the water, and the Committee requested the Medical Officer of Health to make a thorough investigation into the whole matter and report to them. As a result of investigations carried out, the following report was submitted in the month of March :—

“ With reference to the minutes of the Sub-Committee for
“ Carluko Water Supply, of date 24th January, I now beg to
“ report that on two occasions recently I have visited this District,
“ accompanied by the Chemist and District Sanitary Inspector, and,
“ after having several samples analysed, report as follows, viz. :—

“ That this supply is free from nitrogenous organic pollution,
“ but requires filtration to remove the suspended material, which
“ renders this water of poor physical appearance. I would there-
“ fore recommend that this water be filtered before being discharged
“ into the distributing tank at Coldstream. .

“ Carluko is supplied from springs collected in a tank situated
“ near Springfield. and at a point near Middlehouse Farm, and
“ this supply is augmented from a bore spring about 25 feet
“ deep. These waters are stored for supply in a distributing
“ tank at Coldstream, and constitute the supply to the higher-lying

“ area of the town of Carluke. The lower area is supplied by
 “ water under an agreement with the Burgh of Wishaw, and I
 “ understand it is also possible to draw further from the Airdrie
 “ and Coatbridge supply, if necessary.

“ No complaint, so far as I am aware, exists about the Wishaw
 “ water, but the complaint is confined entirely to the Springfield
 “ supply, and is to the effect that the water is dirty or contains
 “ matter in suspension.

“ On 17th February, when eight samples were taken for
 “ analyses, it was noticed that several of these samples contained
 “ suspended solids, while others did not. In the town this
 “ could be accounted for by pipe condition, and by a disturbance
 “ of the deposited material through variations of pressure, which
 “ might be set up by a heavy draw of water in a particular area,
 “ but no information was forthcoming from the local superin-
 “ tendent to show that any such reduction of pressure was taking
 “ place. Microscopical examination of the deposit in the samples
 “ taken at Roadmeetings indicated that this deposit was not that
 “ usually found in pipe lines.

“ Samples taken on 4th March indicate quite clearly that the
 “ origin of this trouble lies between the entrance of the bore spring
 “ at Middlehouse and the tank at Coldstream.

“ The Springfield Spring water is of excellent quality, and con-
 “ tains only a trace of iron.

“ The Bore Spring is of good organic quality, but contains
 “ much more iron than is desirable in a domestic supply. When
 “ these mixed waters arrive at Coldstream tank, the water contains
 “ solids in suspension quite sufficient to impair the value of this
 “ supply for domestic purposes. The water at the outlet end of
 “ the tank, and again at Crawford Walls Bridge, is in the same
 “ condition. Attention is particularly called to the figures for
 “ iron in these samples, from which it will be seen that practically
 “ the whole of this is in suspension, and only traces in solution.

“ For this reason, as already stated, I would recommend that
 “ this water be filtered before being discharged into the tank at
 “ Coldstream, and in this manner prevent a large amount of
 “ deposit from entering the pipe line to be stirred up and brought
 “ into circulation at every variation of pressure over the system.
 “ This would improve the quality of this supply in a very marked
 “ degree.”

The matter was still under consideration at the close of the year.

Carnwath and Carstairs Junction.—Carnwath was formed into a special water district on the 18th January, 1897, the supply being obtained from springs at Southtown, about five miles from the village.

Carstairs Junction is within the boundaries of the special water district, but until 1914 had two sources of supply, viz. :—

- (1) the River Clyde supply, which was pumped direct to an elevated tank situated near Carstairs Railway Station. This supply (which is now used for water locomotives) was laid on to about 130 houses owned by the railway company. The properties so supplied were principally two-storey blocks, and the intermittent supply, especially to the upper-floor houses, was the subject of continuous complaint; and
- (2) Carnwath Special District Supply (which was only available from Kennedy wells situated in the street) being for domestic purposes.

After negotiations with the railway company, arrangements were made to abandon the Clyde supply and to substitute Carnwath District water as soon as the Committee could provide an ample supply. The Committee procured an additional supply by meter from the Motherwell main which is situated near the railway bridge, south-west of Carnwath Station. A pressure-reducing valve was installed to prevent water from being forced back to Carlindean tank and running to waste at the overflow pipe.

In the year 1927 the local Committee went very carefully into the question of procuring an additional supply, with a view to effecting a reduction in the consumpt from the Motherwell main. Samples were taken from the Darby Burn and the Adder Burn with the following results :—

Darby Burn, Southtown.—A sample was procured on the 22nd June, 1927, from the above proposed additional source of supply for Carnwath Special Water Supply District. The Analyst reported that this water was very similar in character to that of the Adder Burn. It is free from pollution by nitrogenous organic matter, but would not constitute a satisfactory domestic supply owing to its peaty nature.

Adder Burn, Southtown.—The sample procured from the Adder Burn on the same date as above proved to be free from nitrogenous organic pollution, but, having regard to its peaty nature and to results of a previous sample, would not constitute a satisfactory domestic supply.

Carstairs Village.—This district is supplied wholly from the Motherwell main, a connection being made at a point near Ryeflatt Bridge, which is situated about one mile distant from the village. This supply is abundant, but the turbid condition of the water at intervals necessitates frequent scouring of the pipes.

As a result of a complaint being received of the turbid condition of the water from a stand-well at Avenue Road, a sample was taken for analysis. This water was certified to be free from pollution by nitrogenous organic matter, and the turbid condition was probably due to the water having to be turned off to allow of a connection being made to a new property.

Crawford.—This district is supplied from several sources, viz.:—

- (1) Colinsburn, at an annual rental of £22 14s. 2d. ;
- (2) springs on Mr. Murray's lands, at an annual rental of £10 ;
- (3) the Glebe supply, for which a capital sum of £10 was paid ; and
- (4) three different connections to the Wishaw main at (a) Murray's Hotel, (b) Public House Trust Hotel, and (c) a public supply by meter.

This supply is ample for the district.

Crossford and Hazelbank.—This district was formed in 1923, the whole supply being obtained from the Wishaw main in Lanark Road, Braidwood (for particulars see notes on No. 2—Braidwood).

About two-thirds of the total water consumed in this district has been sold to tomato-growers, &c., by meter, at 8d. per 1,000 gallons.

Douglas.—The primary source of supply was from springs at Pagie and Burnhouse, but, as this proved insufficient for the needs of the district, the Committee laid on in 1921 a secondary supply from Townheadhill. This district is now adequately supplied.

Forth and Wilsontown.—This district was originally supplied from springs on the lands of Mossplatt, which gravitates to a pumping-station situated at Lower Throughburn, thence the water is pumped to an elevated tank at Forth, which has a capacity of 40,000 gallons.

In consequence of considerable shortage due to the increased demand from the housing scheme, the Committee resolved, in 1924, to lay on an augmentation supply from Skylaw and Lambcatch. The combined supplies have proved ample for the needs of the district, but during the summer of 1927 complaints were received regarding the

turbid state of the water. The question of providing a new chemical filter was discussed, but before proceeding with the work the Medical Officer of Health was requested to report regarding the whole matter. The following report was submitted:—

“ FORTH WATER SUPPLY.

“ With reference to your letter of 1st instant, requesting me to report on the filtration of this water supply, I have now gone carefully into the whole question and beg to report as follows:—

“ The source of this supply lies on the rising ground about two miles above the village of Wilsontown, and, with one exception, all the feeders are upland surface waters of a very peaty nature. There is, however, a good flow of spring water from a spring known as the Beamer Shaw Spring. These various waters are collected in a storage tank from which the water gravitates to Forth, where an additional supply is stored in an overhead tank. Complaints have arisen about the quality of this water, and samples have been taken for analyses. These show that at present this supply is unsatisfactory, due to matter in suspension and colour.

“ On 5th September, I inspected the whole gathering area, accompanied by Dr. Reid, Forth; Dr. Fraser, Lanark; the County Chemist, and Mr. Paterson, the District Sanitary Inspector. Several samples were taken for analyses, the results of which show that there is no evidence of nitrogenous organic pollution in any of the waters used for supply, but all of them with the exception of the Beamer Shaw Spring water, are, in their present condition, unsatisfactory for domestic use owing to their peaty nature. Certain of the feeders are extremely bad and should for this reason be totally excluded from the supply. An offer has been made to provide a filter, together with suitable chemical apparatus for a sum of £468 sterling.

“ Before discussing this offer I wish to point out that, in my opinion, two alternatives arise, viz.,

“ (1) Consideration as to whether the Beamer Shaw Spring would not, together with the water from a bore situated much nearer the village, be sufficient for supply purposes. The water from the bore is free from pollution, but somewhat hard. These two waters would not require filtration, but the water from the bore would require to be pumped.

“ (2) Filtration of the supply as presently existing. To do so in a satisfactory manner coagulation with alumina followed by filtration would be required, but it must be pointed out that owing to the very variable character of this water the addition of alumina on which the whole efficiency of the filtration depends becomes a skilful operation, and unless this addition can be systematically controlled it is not worthy of consideration, as faulty alumina treatment may set up a worse condition than that presently existing.

“ To come now to the offer for a filter and chemical apparatus
 “ to treat this water, I have gone carefully over the plan of the
 “ filter and chemical apparatus, together with the relative corres-
 “ pondence, and regret that I cannot accept this installation as one
 “ likely to give satisfaction for the following reasons:—

- “ (1) Method of adding alumina;
- “ (2) Washing of the filter;
- “ (3) Control of the rate of filtration; and
- “ (4) No definite guarantee as to the degree of purification
 “ obtained.

“ No. 1.—Method of adding the alumina. As already stated,
 “ the efficiency of filtration depends very largely on a regular dose
 “ of alumina being added to the water, and the apparatus for this
 “ purpose must not only be capable of adding an amount pro-
 “ portionate to the flow, but in itself be capable of adjustment so
 “ that a greater or smaller amount depending on the condition of
 “ the raw water can be added. It does not appear that the
 “ apparatus designed by this Company is capable of doing so; in
 “ fact, they only claim up to a rate of two grains per gallon, and I
 “ am quite satisfied that a greater dose than this is required for the
 “ Forth water. In this connection it is of further interest to note
 “ that they have made no tests on the water received by them,
 “ but in their letter, dated 7th March, 1927, they say ‘ this water
 “ ‘ is not sufficiently hard to allow the alumina to act properly,’
 “ and they propose to harden it with either lime or soda. From
 “ our knowledge of the chemical composition of this water, the
 “ County Chemist, who has a great experience in treating waters
 “ both at home and abroad, assures me that he is prepared to treat
 “ this water with alumina alone.

“ 2.—Washing of the filter. It is claimed that satisfactory
 “ washing can be performed without agitation. This is entirely
 “ contrary to our experience. It is, of course, true that washing
 “ will depend on, not only the amount of solids coming down with
 “ the raw water, but also on the dose of alumina, but I am certain
 “ that this filter will require much more than 1,200 gallons of wash
 “ water per day to keep it clean, when dealing with the Forth water.
 “ This is at the rate of $1\frac{1}{2}$ per cent., and filters at present in
 “ operation in the County of Lanark treating a cleaner water, and
 “ with agitation during washing, require 7 per cent.

“ 3.—Control of the rate of filtration. No means are provided
 “ for control beyond at the inlet valve by hand. This is not
 “ reliable, and I would suggest that the rate of filtration be con-
 “ trolled by means of a floating valve placed in the overhead supply
 “ tank which would also prevent a waste of filtered water through
 “ overflow.

4.—Guarantee as to purification. This is, of course, the final
 “ test, and I would require the Company to guarantee not only the
 “ removal of solids and objectionable colouring matter, but also

“(1) that the filtered water contains not more than 100 bacteria per c.c.; and (2) that the removal of colour be equal to 95 per cent. and that the filtered water contains no alumina in solution “or in suspension.”

After consideration of this report, it was unanimously agreed to depart from the proposal to instal a chemical filter. It was also resolved that the sources of water supply, other than the Mouse intake and the Beamer Shaw Spring, should be discarded. Complaints against the quality of the Mouse Water had arisen in time of flood when the sources of supply were more liable to pollution, and in order to obviate this it was agreed that a leaping-weir and scour pipe should be installed at the Mouse intake tank and that the screens at the storage tank should be raised.

Kirkfieldbank.—The water supply for this district is obtained from two sources, viz. :—

- (1) From springs on the lands of Byretown, Corehouse; and
- (2) a connection from the main (owned by the Wishaw Water Commissioners) near Baronald Cottage, where a meter and pressure-reducing valve are installed.

The latter supply, being auxiliary, is only used when our own supply falls short of the demand. It was found necessary, during the latter part of 1927, to make considerable use of the Wishaw supply, but for several weeks past our own tank has been full and capable of meeting the demands of the district.

During the operation of laying the new sewer, the water pipe, which is 3 inches in diameter, was fractured several times, when it was found to be corroded fully half its bore. Special mention is made of this fact so that the Committee may keep in view the necessity of renewing this service main.

Law.—There are three supplies for this district, viz. :—

- (1) Springs at Badshaw;
- (2) the Wishaw main; and
- (3) the Motherwell main.

(1) The springs at Badshaw are about 4 miles distant from the village, and the water gravitates in two 4-inch cast-iron pipes to a service tank at Lawhill. This tank has a depth of $11\frac{1}{2}$ feet, and at 5,000 gallons per foot has a capacity of 75,500 gallons when full. Before leaving Badshaw the water is passed through sand-filters.

(2) Some years ago the Committee made an arrangement for a supplementary supply to be obtained from the Wishaw main, and a connection was made near Belstane Farm.

(3) Later, a further supply was obtained from the Motherwell Water Commissioners from their trunk main in the Old Wishaw Road.

Supplies for this district are adequate in all respects.

Lesmahagow and Coalburn.—Lesmahagow and Coalburn are embraced in the one district, but are served from two distinct sources.

(a) *Lesmahagow.*—This part of the district derives the bulk of its domestic supply from springs at Lawriesmuir and Muirsland, which gravitate to a service tank at Ellensbank.

For a considerable time this supply has satisfied the needs of the district, but, as a reserve, in 1925, the Committee arranged for a connection being made to the Middle Ward Main (Camps supply) at a point near Cemetery Lodge. Approximately, 12,000,000 gallons of this water have been used since the connection was made.

(b) *Coalburn.*—The source of this supply is from springs on the lands of South Bankend Farm, which gravitate to a service tank at Middlemuir. Beyond a few breakages caused by settlements, this supply has been very well maintained.

To provide for cases of emergency the Committee, in 1925, arranged for a connection being taken from the Middle Ward main (Camps Supply) at a point near the junction of the Carlisle and Gateside roads. Since this connection was made 2,000,000 gallons of water have been drawn from this source.

Ponfeigh and Rigside.—The existing supply to Ponfeigh district is derived from the following sources :—

- (1) The Caldwell spring;
- (2) Ponfeigh Burn; and
- (3) a connection from the Middle Ward main at Millbank, Douglas.

The original supply was introduced by the Coltness Iron Company, Limited, to standwells in the village. The provision of modern sanitary conveniences to the Company's Houses in 1923

necessitated a greater supply than was then available, and the Committee, by arrangement, took over the existing works from the Company, formed a special water supply district and augmented the supply from the Ponfeigh Burn.

In 1924, with the progress of the District Committee's Housing Scheme, it was considered desirable to further supplement the supply. This was accomplished by taking a connection from the Middle Ward main at Millbank, Douglas.

This district is now well supplied.

Roberton.—The supply, which gravitates from springs on the lands of Kilnpottees Farm, has always proved sufficient for the needs of this district and requires no further comment.

Symington.—This special water district was formed in 1912, when the Committee took a supply of water from the proprietor of St. John's Kirk on the understanding that not more than 20,000 gallons per day would be required. During the summer of 1926, considerable difficulty was experienced in maintaining the pressure throughout the district, but after a thorough examination of the whole system several leakages were discovered, which, when remedied, removed all cause for complaint.

Thankerton.—This district is wholly supplied from the Wishaw main, and beyond a little inconvenience during the scraping of the trunk main (carried out in 1927) is efficiently served.

Private Supplies.

Pettinain.—Complaint was made as to the character of the water supply to the new houses, and several samples were taken for analyses. The matter was still being investigated at the close of the year.

Hillhead Farm, Covington.—In last year's annual report full information was given as to the unsatisfactory nature of the water supply to Hillhead Farm, Covington. This supply during 1927 was abandoned and another supply introduced after having been analysed and approved by the County Analyst.

Cranley, Carstairs.—The Superior proposed to provide a new water supply for Windyshields Farm and two workers' cottages on the estate.

(a) A sample was procured from a spring within the policies, and the results of analysis indicated that this water was free from nitrogeneous organic matter and, provided suspended material was removed, would afford a satisfactory supply for domestic purposes.

(b) A sample procured from a watercourse on the policies proved to be unsuitable for domestic purposes.

Carmacoup, Douglas.—A sample of water was taken for analysis from a spring which is situated on the bank of Douglas Water. The water was clear, and not liable to pollution unless the Douglas Water overflowed its banks and submerged the spring. On analysis the water was found to be of doubtful purity.

Broadfield, Symington.—A sample of water taken from a force pump at Broadfield Farm showed on analysis that the water is liable to pollution, and cannot, therefore, be recommended as a suitable domestic supply.

Rainfall.—The following is a statement of the rainfall for the past ten years, as recorded at Coldstream Reservoir, Carluke:—

Year.						Rainfall in Inches.
1918,	-					24·75
1919,	-	-	-	-	-	31·85
1920,	-	-	-	-	-	38·75
1921,	-	-	-	-	-	39·70
1922,	-	-	-	-	-	30·15
1923,	-	-	-	-	-	32·65
1924,	-	-	-	-	-	31·90
1925,	-	-	-	-	-	35·00
1926,	-	-	-	-	-	39·80
1927,	-	-	-	-	-	48·60

Average for the 10 years, 36·92 inches approximately.

DRAINAGE.

Special Drainage Districts.

There are now 15 special drainage areas in the Upper Ward District, and these comprise the following:—

Blackwood and Auchenheath.	Crosslaw.
Braidwood.	Douglas.
Carluke.	Kirkfieldbank.
Carnwath.	Law.
Carstairs Village.	Lesmahagow.
Coalburn.	Ponfeigh.
Crossford and Hazeibank.	Symington.

Thankerton.

Notes on each district are appended.

Blackwood and Auchenheath.—This district was formed in 1920 and embraces the localities of Blackwood, Kirkmuirhill, and Auchenheath. The District Committee's Housing Schemes at Lochanbank and Auchenheath, all of which are provided with modern sanitary conveniences, made proper drainage facilities essential and hastened the formation of the district.

It was mentioned in a previous report that, from one of the outfalls, crude sewage was discharged into a small stream which joined the River Nethan, but a properly constructed septic tank was introduced about three years ago, which now effectively deals with this sewage before it is discharged into the stream.

The Committee have still in view the construction of purification works on the site near Burnfoot Bridge.

The Local Committee considered an estimate of cost of these works, but, as no official complaint had been made regarding the present system of drainage, and having consideration as to the cost, it was resolved not to proceed with the scheme meantime.

Braidwood.—This area was formed into a special drainage district in 1921. The sewer provides drainage for Upper Braidwood and discharges into a septic tank at the side of the Gill Burn. It is of sufficient capacity to deal with one-third of the total 24 hours' volume of sewage. The drainage from Lower Braidwood is conducted in a sewer having an outfall direct to the Braidwood Burn.

Carluke.—This district was formed in 1891. The main outfall discharges into a septic tank which is situated to the west of the railway station. The effluent from this tank is irrigated over approximately 20 acres of land. Originally a 9-inch sewer received the drainage from the lower end of Stewart Street, part of Douglas Street and Burn Road, which discharged on to a field about 10 acres in extent, where it was irrigated. With the completion of the District Committee's Housing Schemes at Brown Street, etc., it was deemed necessary to provide a septic tank on the lands above-mentioned. A new sewer was laid from this tank along the main road to a point opposite Castlehill Store, where it is diverted on to lands suitable for irrigation purposes.

Carnwath.—This district was formed in 1902. The sewage is conducted in a sewer on to the lands of Lampits, adjoining the River

Clyde. A small tank is there provided, and the effluent irrigated on the farm lands. The irrigation is satisfactorily carried out under the personal supervision of the tenant farmer, Mr. Mather.

At a request of the latter, a new unclimbable fence was erected round the tank during the year.

Carstairs Village.—This district was formed in 1923, the boundaries being co-extensive with the Special Water Supply District. The sewage is received in a septic tank, the effluent from which is discharged into the Flush Burn. Ground is available for filters should these at any time be found necessary.

Coalburn.—This district was formed in 1920. Two outfalls are provided—one to the Muir Burn, a tributary of the Coal Burn, and another to the Coal Burn—each having purification works consisting of a covered tank with detritus chamber and sludge-pit.

The drainage from the Bellfield and Braehead area of the district is conveyed in a subsidiary sewer which links up with the main sewer at a point opposite Railway Terrace, whence it is discharged into the tank above-mentioned at the side of the Coal Burn.

Crossford and Hazelbank.—This district was formed during 1927, but the commencement of the necessary works has been deferred for a year.

The formation of Crossford into a special water district in 1924, and the subsequent laying-on of water to several properties, has rendered necessary proper drainage facilities, which at present are of the most primitive type.

To drain this village efficiently it was recommended that a 9-inch fireclay pipe be laid along the public highway from the house known as Drumassie, at the south end of the village, northwards to a point opposite Tillietudlem Hotel, and north-eastwards through the lands of Grove Farm to a point on the Holm Road, and westwards for a distance of 63 yards or thereby, and thence northwards through orchard in Grove Farm for a distance of 53 yards to a septic tank, the effluent from which would discharge into the River Nethan. Other sections would be:—

- (1) A 9-inch pipe from the Nethan Bridge southwards to the point where the sewer enters the lands of Grove Farm; and
- (2) a 9-inch pipe from the U.F. Church on the Holm Road in a north-easterly direction and then north-west to the point where the sewer leaves the Grove lands.

The estimated cost of these works will not exceed the sum of £1,580. This cost does not include way-leaves or surface damages. Information taken from the Police Census of 8th July, 1927, is as follows:—

Total Population.	Inhabited Houses.	Empty Houses.	House in course of erection.
992	259	11	1

Hazelbank.—The existing drainage arrangements for the houses on the west side of the village is to discharge the sewage into a ditch running parallel with the public highway having an outfall to a burn which joins the River Clyde. This is most unsatisfactory, as during warm weather a nuisance is caused which has been the subject of many complaints. It is recommended that a 9-inch fireclay pipe be laid along the west side of the public highway from the north to the south end of the village, thence eastwards to a septic tank to be built near the River Clyde.

The estimated cost of these works would not exceed the total sum of £386. This cost does not include surface damages or way-leaves.

From the Police Census taken on the 8th July, 1927, the following data was obtained:—

Total Population.	Inhabited Houses.	Empty Houses.	House in course of erection.
183	46	...	...

Crosslaw. — This district was formed in 1893. The sewage is conveyed on to the lands of Bonnington Mains, where it is satisfactorily irrigated.

Douglas.—This district was formed in 1891. The sewage discharged to the Douglas Water from two outfalls. Two intercepting tanks are provided at these outfalls.

Kirkfieldbank.—This district was formed in 1926. The provision of sewerage and sewage purification works was well in hand at the end of the year 1927.

Law.—This district was formed in 1894. There are two outfalls (1) the Garrion Burn—east outfall—and (2) the Gill Burn—west outfall. The outfalls to the respective streams are a considerable distance from any dwelling house, and up to the present have not given rise to any serious pollution.

Lesmahagow.—This district was formed in 1891. The sewage is received in a septic tank near Craighead Mill, immediately to the north of the Carlisle Road bridge, and the effluent therefrom is discharged into the River Nethan.

Ponfeigh.—This district was formed in 1923. The sewage is received into a septic tank capable of dealing effectively with the whole drainage of the district. The effluent is discharged to Douglas Water.

Symington.—This district was formed in 1914, but the provision of sewerage and sewage purification works was not proceeded with until 1925. The sewage is conveyed to a septic tank, the effluent from which is discharged to the River Clyde.

Thankerton.—This district was formed in 1903. The sewage is conveyed to a covered tank and an area of about 3 acres of land, where it is irrigated. The outfall is to the Glade Burn which joins the River Clyde.

Other than Special Districts.

Leadhills Drainage.—After very careful consideration the Committee, having in view the low valuation of the district and the high cost involved in carrying out a suitable scheme, resolved not to proceed with the formation of a special district meantime.

The natural drainage of Leadhills is by means of the Glengonnar Burn, which flows through the centre of the village. This burn receives all the sewage, including a considerable discharge of washings from the lead-washery at the mines. This latter discharge causes the lower half of the burn to become silted up and necessitates periodical cleansing. The Leadhills Mining Company have been approached from time to time with a view to having the lower half of the burn concreted—*i.e.*, the bed and sides of the burn—leaving the top open, and we had an assurance from the late manager, Mr. Skewis, that the Directors had agreed to this expenditure, but, unfortunately, the recent coal strike delayed the carrying out of this work.

The matter was again taken up with the Company, when the manager, Mr. Tregay, was inclined to favour the piping in of the burn in preference to concreting, and was disposed to recommend a liberal contribution towards the work the District Committee may carry out when he submits our proposals to his Directors.

During the past few years many of the houses have been provided with water-closets and sinks, and, in several cases, baths. In each case a small tank has been installed, the effluent only being allowed to enter the burn.

I am of the opinion that the burn should be piped in for the entire length of its course through the village, and would therefore recommend that 30-inch diameter reinforced concrete pipes be laid in the bed of the burn from the north end of the village to the point where the lead washings are discharged, and from this point southwards a similar pipe of 24-inch diameter would suffice. The estimated cost would not exceed £1,992.

The following information was obtained from the Police Census made on the 8th July, 1927:—

Total Population.	Inhabited Houses.	Empty Houses.	Houses in course of erection.
868	240	12	—

Abington Drainage. — The following additional report was submitted to the Committee, when it was agreed to have the works carried out on the lines recommended.

Complaints have been received recently regarding a drainage nuisance emanating from the burn which receives the sewage of the village and also the drainage from the private slaughter-house owned by Robert Colthart & Sons, regarding which I beg to make the following statement and suggestions:—

The source of the burn referred to is at the curling pond, situated mid-way between the smithy and Leadhills Road, but no pollution is taking place until it reaches a point near the slaughter-house. From here the burn is piped-in to a point opposite the hotel laundry, where it emerges into the open again and thence continues to the River Clyde.

During its course it receives several outfalls, but there is one in particular, opposite the grounds of the U.F. Church, which discharges the bulk of the drainage from the village. This outfall appears to be the chief cause for complaint.

The most satisfactory arrangement undoubtedly would be to pipe-in the burn from the point mentioned at the hotel laundry to a point about 60 yards below the U.F. Church grounds, but, having regard to the cost, it might meet the present requirements were a drain laid

along the side of the burn to intercept drainage from the housing scheme and also the outfall already described near the church grounds and continued for a distance of about 50 yards below that point.

The estimated cost of the latter scheme would be £55. Information received from the Police Census taken on 8th July, 1927, is as follows :—

Total Population.	Inhabited Houses.	Empty Houses.	Houses in course of erection.
118	32	3	6

Sewage Disposal.—As there are now several sewage tanks in the district which require to be emptied periodically the Diaphragm Force Lift Pump, purchased by the Committee two years ago, has been effectively employed for this purpose during the year.

SCAVENGING.

Special Districts.

There are 15 special scavenging areas in the Upper Ward District, no addition being made during the year. The districts are enumerated as under :—

- | | |
|--|--------------------------|
| 1. Blackwood and Kirkmuirhill
(which includes Auchenheath). | 8. Douglas. |
| 2. Carluke. | 9. Forth and Wilsontown. |
| 3. Carnwath. | 10. Haywood. |
| 4. Carstairs Junction. | 11. Kirkfieldbank. |
| 5. Carstairs Village. | 12. Law. |
| 6. Coalburn. | 13. Leadhills. |
| 7. Crosslaw. | 14. Lesmahagow. |
| | 15. Ponfeigh. |

Blackwood and Kirkmuirhill and Auchenheath.—This district was formed in the year 1922. The work is let by contract. In view of the long distance separating Auchenheath from Blackwood and Kirkmuirhill, and the consequent cost that would be involved in scavenging the area as a whole, Auchenheath is contracted for separately.

The contract price of scavenging Blackwood and Kirkmuirhill is £90, and that for the Auchenheath area £20 per annum respectively—a total of £118 for the whole district.

The district is efficiently scavenged.

Carluke.—The work in this district is undertaken by the Committee's whole-time servants. Two men are employed, with two horses and carts. This number is sufficient to carry out the work. The scheme continues to give entire satisfaction, and is in every way a decided improvement on the old method of contracting for the work. It is pleasing to note that not a single complaint was received from this district in the course of the year.

Where water-closets have not yet been provided, householders may continue to make use of the ashpits until arrangements are made for the introduction of water-closets, but where these modern conveniences have been provided the use of ashpits has been entirely discontinued.

High Street, the principal thoroughfare, is scavenged every morning, while the eastern and western sections are scavenged every alternate morning.

During the year 16 additional water-closets were provided at the request of the Sanitary Department, and this number is being constantly added to.

Carnwath.—There are no ashpits in this district, and while there is still a number of properties not provided with water-closets it will be seen that this number is steadily diminishing, 9 water-closets having been introduced in the course of the year.

The scavenging work is contracted for at a cost of £75 per annum.

Carstairs Junction.—There are no ashpits in this districts. A daily removal system is in operation, the work being contracted for at a cost of £110 per annum. The work is carried out satisfactorily.

Carstairs Village.—All the properties presently provided with water-closets are scavenged three times weekly. The contractor is required to empty all ashpits in the district when necessary, and must in no case allow any ashpits to become overfull.

The contract price for the scavenging of this district is £50, the work being efficiently carried out.

Coalburn.—The scavenging of this district is contracted for at a cost of £130 per annum, and the work is satisfactorily done. In this district the Committee have provided a covered tip-cart to be used by the contractor.

Crosslaw.—This district comprises the Loch Road only. Dustbins are emptied twice weekly, viz., on Tuesday and Friday. This arrangement gives entire satisfaction. The work is contracted for at a cost of £18 10s. per annum.

Douglas.—There are no ashpits in this district, although there are still a number of dry-closets. The work is carried out by the Committee's whole-time servant, and continues to give every satisfaction.

Forth and Wilsontown—Haywood.—The scavenging of these districts is carried out by the Committee's whole-time servant. One horse and cart are employed. Where modern conveniences exist the bin system of refuse collection is made thrice weekly. The work is now satisfactorily carried out.

Kirkfieldbank.—As mentioned in last year's Report the Committee were requisitioned by the Lesmahagow Parish Council to form Kirkfieldbank into a special drainage and scavenging district.

As the work of laying the new sewer is still in progress the question of scavenging has been deferred until its completion.

Law.—The work is let by contract at a cost of £104 per annum. All properties within the district provided with modern conveniences are scavenged three times weekly while those outwith this category continue to make use of the existing ashpits, but the latter, however, are gradually being dispensed with. A number of improvements were effected during the year, and negotiations were still proceeding for the introduction of further modern conveniences.

Leadhills.—While there is a large number of houses in this district now provided with modern sanitary conveniences, it has not been considered necessary to institute a daily removal system of household refuse. The public ashpits are still in use, and the work is contracted for at a cost of £52 per annum.

Lesmahagow.—This work is carried out by the local committee's own servant, and is a great improvement over the former system of contracting. There are no ashpits in the district, the household refuse being removed daily.

Ponfeigh.—This work is contracted for at a cost of £130 per annum. The contractor is required to remove all refuse three times per week, and the work is satisfactorily carried out.

LIGHTING.

Special Lighting Districts.

There has been no addition during the year 1927 to the number of special lighting districts enumerated in last year's Annual Report. This number remains the same and comprises the following:—

- | | |
|----------------|-------------|
| 1. Carluke. | 3. Douglas. |
| 2. Crosslaw. | 4. Law. |
| 5. Lesmahagow. | |

There is nothing of interest to report regarding any of the five lighting areas, a full service having been maintained throughout.

SPECIAL DISTRICTS.

The special districts for the purposes of water supply, drainage, scavenging, and lighting are shown in the following table. The rates of assessment (half-proprietor, half-tenant) for the year 1927-28 are also shown. A blank in the assessment column means that no district has been formed for the special purposes indicated.

District.	Water.	Drainage.	Scavenging.	Lighting	Total Assessment.
Blackwood, ...	2/1	2/-	3½d.	...	4/4½
Braidwood, ...	1/2½	11½d.	...	...	2/2
Carluka, ...	11½d.	9½d.	4½d.	4½d.	2/6
Carnwath, ...	2/-	11½d.	7d.	...	3/6½
Carstairs Junction, ...	2/-	...	4½d.	...	2/4½
Carstairs Village, ...	2/10	6½d.	6½d.	...	3/11
Crawford, ...	1/7	...	*	...	1/7
Crossford and Hazelbank, ...	1/7	...	...	...	1/7
Crosslaw, ...	...	1½d.	2½d.	6d.	10d.
Douglas, ...	1/3	5d.	7½d.	3½d.	2/7
Forth, ...	2/-	...	4d.	...	2/4
Haywood, ...	...	...	1/6	...	1/6
Kirkfieldbank, ...	1/3	3d.	*	...	1/6
Law, ...	4d.	4d.	4d.	3d.	1/3
Leadhills, ...	...	...	6d.	...	6d.
Lesmahagow, ...	11½	9d.	6½d.	3d.	2/6
Coalburn, ...	11½	2/-	5d.	...	3/4½
Ponfeigh, ...	2/7	11d.	6½d.	...	4/0½
Roberton, ...	2/2	...	...	...	2/2
Symington, ...	1/4	7½d.	...	...	1/11½
Thankerton, ...	4d.	1/-	...	...	1/4d.

*District formed but not yet in operation.

NUISANCES.

71 complaints were received in the course of the year. The subject of complaint in each case was carefully enquired into, and where necessary steps were taken to secure the discontinuance or abatement of the nuisance.

In addition to the above, a great many inspections were made with a view to the detection of nuisances, and as a result 156 intimations were served from the office under Section 19 of the Public Health (Scotland) Act, 1897.

In many instances the existence of nuisances was brought to the notice of the authors verbally, and remedial measures carried out without further intimation. In no case was it found necessary to have a statutory notice under Section 20 of the Public Health (Scotland) Act, 1897, served in respect of the non-abatement of any nuisance.

COAL MINES ACT, 1911.

During the year 1 notice was received from H.M. Inspector of Mines intimating the discontinuance or abandonment of the following mine, viz., "Dales No. 2" mine, Braidwood. On inspection it was found that the provisions of the Act were being given effect to, suitable fencing being erected.

SCHOOLS.

There are 51 public schools within the Upper Ward District. In the course of the year many visits were paid to these in connection with the occurrence of infectious sickness.

Improvements were effected at Lawhill Public School, Law, by the introduction of 13 water-closets erected in the playgrounds.

WORKSHOPS.

198 inspections were made to workshops in the Upper Ward District during the year. Two notices were received from H.M. Inspector of Factories. One related to the need for lime-washing of walls, etc., in a boot-repairing workshop, whilst the other referred to broken plaster-work in a bakehouse. Notices were served upon the owners, and in due course the work was carried out satisfactorily.

No lists of out-workers were received during the year.

FOOD AND DRUGS.

The administration of the Sale of Food and Drugs Acts is undertaken by the County Council, and full information as to the samples taken for analysis and other work done will be found in the County Report.

RIVERS POLLUTION.

The administration of the Rivers Pollution Prevention Act is undertaken by the County Council, and information as to the action taken will be found in the County Report.

BURIAL GROUNDS.

No complaint was received during the year regarding any burial ground in the district.

Five interments were carried out at the instance of the Local Authority under Section 69 (1) of the Public Health (Scotland) Act, 1897, at a total cost of £18 17s. 6d., of which £6 14s. was recovered.

ACCOMMODATION FOR SEASONAL WORKERS.

74 intimations were received during the year of the intention to accommodate seasonal workers, this being the largest number received since the By-laws came into force.

Except in a few cases, each farm was visited before the arrival of the workers, and the farmer in each case instructed as to the number of workers he could accommodate on his premises, and other relative matters.

The accommodation provided in most cases was in conformity with the By-laws, but in six instances it was necessary for the Local Authority to take legal proceedings, four of which were against farmers and two against employers, for contraventions of the By-laws.

Much confusion and difficulty was experienced by the farmers and employers in regard to the removal of squads of workers from one farm to another on account of the inclemency of the weather. This difficulty was realised by the Department and allowance made in exceptional cases.

For the information of the Board, I might mention that several complaints were received from farmers that the premises vacated by certain squads were left in a very dirty condition. In one case the employer of an offending squad was communicated with, and he made

arrangements for two members of his squad to return and have the premises cleansed. The farmers have been instructed to ascertain before the squad leaves that the premises are in a cleanly condition.

Many of the registered farms in the District were visited during the season by Miss M'Michael, Lady Inspector (Housing) of the Board of Health staff.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

The Board, in their Circular—Public Health, No. 7, 1927 (Counties)—request sanitary officers to furnish information in detail of the dairying industry in their respective districts.

It was mentioned in last year's Annual Report that the Local Authority had prepared dairy by-laws, but as these had not then been approved by the Board of Health and Board of Agriculture, it was impossible to give an accurate statement as to how far the dairy premises in the district complied with these By-laws. The By-laws having been approved on the 13th May, 1927, it is now possible to furnish this information:—

(1) Statement of conditions found and particular points that require remedy.

On inspecting the dairy premises in the district the principal defects found in order of precedence were—

- (a) Lack of proper inlet and outlet ventilation;
- (b) narrow and shallow grips with insufficient fall to trapped drain outside;
- (c) lack of beam-filling to prevent the lodgement of dust;
- (d) wooden trevasses;
- (e) walls not rendered smooth;
- (f) (in older byres) the large amount of timber, rafters, etc., carrying roof.

(2) Particulars of the extent to which (a) the cowsheds comply with the structural and sanitary requirements of the Dairy By-laws.

Approximately, 60 per cent. of the cowsheds in the district comply favourably in this respect.

- (b) The extent to which dairymen and their employees conform to the requirements of the By-laws relating to methods of milking, handling, and generally the production of clean milk.

Since the by-laws have been circulated and the dairy premises inspected the standard of dairy hygiene has been considerably raised. The practice of the milkers washing their hands after milking each cow; the use of clean overalls, together with the cleansing of the animals' udders before milking, is becoming more general. The bulk of the milk produced in the Upper Ward District is consigned to wholesale dairymen in the larger cities, *e.g.*, Glasgow and Edinburgh, and also to creameries within and without the district. In many instances the wholesale purchasers examine the supplies daily with a view to finding out the dirt content, etc., and in this way a check is made on producers, making it imperative for them to employ cleanly methods.

It is pleasing to note that very few complaints have been received from other Local Authorities concerning contamination of the milk consigned to their respective districts.

(3) Notes of improvements obtained in the conditions of cowsheds and milk-stores, including observations regarding any complaint received or dealt with.

This part of the work has proceeded in a very satisfactory manner since the compilation of a register. Most farmers now realise the value of adequate lighting and ventilation in their dairy byres and its beneficial effect on the health of the herd, and the readiness with which the Public Health Department is consulted regarding these matters is very pleasing.

Many structural improvements to dairy byres, *viz.*, the introduction of cement trevasses, widening of walks, grips or channels rendering the walls smooth and impervious, beam-filling of wall-heads, and the provision of trussed roofs, etc., etc., are now acknowledged to facilitate the daily work of the dairymen in the production of clean milk.

(4) (a) The number of registered cowsheds in the district and the total number of cows therein.

There are 610 registered cowsheds in the district with approximately 12,149 cows therein.

(b) Number of cowsheds exempted from registration and the approximate number of cows in such cowsheds, with observations on this class of cowshed.

The number of cowsheds exempted from registration total 41, and the number of cows therein 79. These relate to cases where one or two cows are kept for private use, principally crofters and shepherds in the outlying parts of the district, also in some cases sheep-farmers and stock-raisers who keep a few cows for their own use and for supplying their workers.

5. The articles of the Milk and Dairies (Scotland) Order, 1925, are being favourably complied with, but in a few cases it was necessary to call the attention of the farmers consigning milk per common carrier in unsealed vessels to the fact that this was a contravention of the Order, when the practice was immediately stopped.

INFECTIOUS DISEASES.

691 visits of inquiry were paid.

477 notices were issued to headmasters.

174 houses or premises were disinfected.

165 patients were removed to hospital.

Fuller details as to infectious disease will be found in the report of the Medical Officer of Health.

WILLIAM PATERSON,

District Sanitary Inspector.

COUNTY OF LANARK
DISTRICT OF THE UPPER WARD

Midwives (Scotland) Act, 1915

ELEVENTH
ANNUAL REPORT

BY THE
MEDICAL OFFICER OF HEALTH

1927

The Medical Officer of every Local Authority shall report annually to that Authority of the administration of the Act within the District of that Local Authority, and he shall transmit a copy of such report to the Central Midwives Board and to the Local Government Board for Scotland.—Section 23.

STAFF.

Administrative Officer.

J. HUME PATTERSON, F.R.F.P.S.(G.), D.P.H.

Executive Officer and Inspector of Midwives.

ALEXANDER FRASER, M.D., D.P.H.

Nurse Health Visitors and Assistant Inspectors of Midwives.

(All hold C.M.B. Certificate.)

HELEN MACGREGOR.

ANNIE H. BELL.

HELEN O. LOCHHEAD.

(Resigned 15th October, 1927.)

ANNIE S. AITKEN.

(Appointed 15th November, 1927.)

Practising Midwives.—14 midwives notified their intention to practise in the Upper Ward District.

These midwives are in *bona-fide* practice, and certified under the Act, though, however, many of them practice seldom by themselves, preferring to attend chiefly on doctor's cases.

Attendances at Confinements.—The total number of births allocated to the district amounted to 920, of which 854 were registered in the district.

921 births were notified, of which 898 were live births and 23 still-births. From these notifications it was found that in 850 cases a medical practitioner was in attendance; in 69 a certified midwife; and in 2 an uncertified midwife. The percentage of births registered in the district which were attended by certified midwives was 8.

Still-Births.—In the *Upper Ward District* 23 still-births were notified. In 22 cases a medical practitioner was in attendance, and in 1 case a certified midwife.

In addition, 1 notification was received from the County Maternity Hospital, Bellshill.

Inspection of Midwives.—The routine inspections made during the year showed that the personal conditions were satisfactory in 6 cases and fair in the remainder.

Puerperal Septicæmia.—During the year 4 cases of this disease were notified by the medical practitioner in attendance. 3 of these cases were removed to the County Hospital, Motherwell, while 1 was treated at home. 1 death occurred at home.

Ophthalmia Neonatorum.—During the year 3 cases were notified by the medical practitioner in attendance. Visits were made by the Nurse Health Visitor, and the cases classified as mild. 1 case was treated in hospital.

Medical Assistance.—No notifications of the calling in of medical assistance were received during the year.

Liability to be a Source of Infection.—1 notification was received.

Form of having laid out a Dead Body.—No notifications were received.

Notification of Death.—No notifications were received.

Offences.—Nil.

BURGH OF BIGGAR

(Area, 62 Acres)

REPORT

OF THE

MEDICAL OFFICER OF HEALTH AND OF THE
SANITARY INSPECTOR

1927

Report of the Medical Officer of Health.

Statistics.

The **population**, as estimated to the middle of the year 1927, was 1,537.

The **births** registered in the Burgh amounted to 16, and, after correction for transfers, numbered 16—males, 8; females, 8, giving a birth-rate of 10·4 per 1,000 of the population. Of these births, 1 was illegitimate, giving an illegitimate rate of 6·2 per 100 births.

The **deaths** registered in the Burgh numbered 25, and, after correction for transfers, amounted to 27—males, 14; females, 13, giving a death-rate of 17·5 per 1,000 of the population.

The following table shows the cause and age periods at death :—

	.1	1-	5-	10-	25-45	45-65	65 & over.	Total.
Meningeal								
Tuberculosis, -	—	1	—	—	—	—	—	1
Other „ -	—	—	—	—	—	1	—	1
Malignant								
Diseases, -	—	—	—	—	—	1	2	3
Cerebral								
Hæmorrhage, -	—	—	—	—	1	—	3	4
Other Nervous								
Diseases, -	—	—	—	—	1	1	—	2
Organic Heart								
Disease, -	—	—	—	—	—	—	7	7
Other Circulatory								
Diseases, -	—	—	—	—	—	—	1	1
Diabetes, -	—	—	—	—	—	—	1	1
Pernicious								
Anæmia, -	—	—	—	—	—	—	1	1
Other Digestive								
Diseases, -	—	—	—	—	—	—	3	3
Premature Birth, 1	—	—	—	—	—	—	—	1
Other defined								
Diseases, -	—	—	—	—	—	1	1	2
Total,	1	1	—	—	2	4	19	27

Prevalence of Infectious Disease.

Notifiable Diseases.—18 cases of infectious disease were notified. The notifications were as follows:—Scarlet fever, 6; diphtheria, 8; erysipelas, 2; chickenpox, 2. The cases removed to hospital numbered 10—scarlet fever, 3; diphtheria, 7. The cases treated in hospital are as follows:—Burgh Fever Hospital, Lanark—scarlet fever, 2; diphtheria, 3; County Hospital, Motherwell—scarlet fever, 1; diphtheria, 4. Visits of inspection were made to the homes where the cases occurred, and disinfection carried out. All precautions to prevent the spread of the disease were taken.

Tuberculosis.—Notifications received numbered 2, one being of the pulmonary type, the other being non-pulmonary.

Institutional Treatment.—2 cases were admitted during the year to the District Sanatorium, Roadmeetings, 1 pulmonary and 1 non-pulmonary.

Domiciliary Treatment.—No cases received domiciliary treatment.

Deaths from Tuberculosis.—2 deaths occurred from tuberculosis during the year, both being of the non-pulmonary type of disease.

Maternity and Child Welfare.

The Burgh is included in the Upper Ward Scheme. The District Nurse acts as Nurse Health Visitor for the Burgh and the surrounding County District.

Notification of Births.—12 notifications were received, and the attendant at birth in each case was a medical practitioner.

Infantile Mortality.—1 death under 1 year was recorded, thus the infantile mortality rate for the year is 62·5 per 1,000 births.

Necessitous Cases. No cases received assistance during the year.

Hospital Treatment.—There were no admissions to hospitals during the year.

Midwives (Scotland) Act, 1915.

Practising Midwives.—There are no practising midwives in the Burgh.

Attendances at Confinements.—12 notifications of births were received, all being attended by medical practitioners.

Still-Births.—There were no still-births.

Puerperal Septicæmia.—No cases occurred.

Ophthalmia Neonatorum.—No cases occurred.

Venereal Diseases.

The Burgh is included in the scheme of the Joint-Committee for the prevention and treatment of venereal diseases.

Milk and Dairies (Scotland) Act, 1914.

There are 2 producers and retailers, and 4 retailers only within the Burgh.

General Sanitation.

Water supply, drainage and sewage disposal, scavenging, and other matters are referred to in the report of the Sanitary Inspector.

Workshops.—These are dealt with in the report of the Sanitary Inspector.

Food and Drugs Acts.—The County Council administer these Acts within the Burgh.

The *Public Slaughter-house* is situated outside the Burgh boundary. A record of the animals killed and dues collected is given in the Sanitary Inspector's report.

Report of the Sanitary Inspector.

The **water supply** for the Burgh of Biggar is obtained from King's Beck Burn, situated about seven miles south of the Burgh of Biggar. The Town Council inspected the inlet of the dam in the month of August last, and were satisfied that the supply was adequate for all purposes.

The **drainage and sewage systems** of the Burgh are dealt with in two portions, east and west. The east portion, passing through two settling tanks, is run in open channels over about six acres of land, which is owned by the Town Council. The sewage from the west, after passing through three settling tanks, is allowed to run in open channels, and spread over the most part of ten acres of land, the property of the Town Council.

Scavenging System.—The ashes and night soil from dry closets are removed on alternate days, that is on Monday, Wednesday, and Friday, from the east end of the Burgh, and on Tuesday, Thursday, and Saturday from the west end. On Friday there is a general collection of all rubbish, &c. The whole of the rubbish is deposited in a coup about one mile outside the Burgh and burned.

During the year 3 water-closets were erected, and the use of 2 dry-closets discontinued.

Nuisances.—Several cases were dealt with during the year. After due notice having been given, they were removed by the owners or tenants, no legal proceedings being necessary.

The **High School** was visited frequently, and found to be kept very clean and in good order.

There are 14 properties without water and sink inside the dwelling-house within the Burgh. Two properties were installed with water and sink during the year.

Water-closets.—There are 17 water-closets, each for two tenants, and 9 water-closets, each for three tenants. There are 12 dry-closets—3 for five tenants, 2 for four tenants, 2 for three tenants, and 5 for one tenant each.

Visits (21) of inspection were made to **tents and living vans**—local and temporary. These were found to be clean and tidy.

Cowkeepers and Sellers of Milk.—There are two cowkeepers within the Burgh. There is one milk shop, which was visited frequently and found to be kept in a very clean condition.

Pig-styes.—Visits of inspection (25) were made to pig-styes, and all were found to be clean and in good order.

Common Lodging-houses.—There is none within the Burgh.

Burial Ground.—The burial ground is situated partly within the Burgh and partly in the County area. The grass is frequently cut, and a good supply of water is given by the permission of the Town Council.

Infectious Disease.—The cases of infectious diseases occurring in the Burgh are noted in the report of the Medical Officer of Health. Inquiries were made as to the source of infection, and frequent visits were made to the houses affected. Thorough disinfection of the houses and bedding was carried out.

Workshops.—There are 46 workshops in the Burgh. Visits of inspection (58) were made at different intervals. There are no underground workshops in the Burgh. The following is a list of the different workshops and the number of persons employed:—

Workshops.	No. of Shops.	NO. OF EMPLOYEES.			
		Males.	Females.	Apprentices.	Total.
Dressmakers and Milliners, -	9	6	13	2	21
Tailors, - - - - -	3	12	14	4	30
Bakers, - - - - -	5	10	12	7	29
Cabinetmakers, - - -	2	5	2	1	8
Jewellers, - - - - -	3	4	1	1	6
Harnessmakers, - - -	1	3	1	1	5
Blacksmiths, - - - -	2	4	—	2	6
Shoemakers, - - - - -	5	9	3	1	13
Laundries, - - - - -	1	—	3	—	3
Engineers, - - - - -	5	14	2	2	18
Plumbers, - - - - -	3	8	1	5	14
Painters, - - - - -	3	11	—	4	15
Joiners, - - - - -	4	12	—	4	16
Total, - - - - -	46	98	52	34	184

Slaughter-house.—The slaughter-house is situated outside the Burgh boundaries. Visits of inspection were frequent, and the premises were found to be kept in a very clean condition. The record of animals killed (which included 31,403 slaughtered for the London markets) and the dues collected are as follows:—

Cattle.	Calves.	Swine.	Sheep.	Total.	Dues Collected.
749	51	448	31,403	32,651	£491 12s. 5d.

Record of Inspections made:—

	No. of Inspections.
High School, - - - - -	35
Workshops, - - - - -	58
Tents and Vans, - - - - -	21
Milkshops, - - - - -	18
Pig-styes, - - - - -	25
Fish Shops, - - - - -	21
Slaughter-house, - - - - -	42
	<hr/>
	220
	<hr/>

WILLIAM M. SMITH,
Sanitary Inspector.



COUNTY OF LANARK.

MIDDLE WARD.

Annual Report for 1927.

STAFF.

PUBLIC HEALTH DEPARTMENT.

MIDDLE WARD DISTRICT.

County and District Medical Officer—

J. HUME PATTERSON, F.R.F.P.S.(G.), D.P.H.

Tuberculosis Officers and Assistant M.O.H.—

J. M'CALLUM LANG, M.D., D.P.H.

JOSEPH R. SUTHERLAND, M.B., Ch.B., B.Sc., D.P.H.

DAVID R. HAMILTON, M.B., Ch.B., D.P.H.

EDGAR A. UNDERWOOD, M.A., B.Sc., M.B., Ch.B., D.P.H.

Assistant M.O. under Child Welfare Scheme—

HENRY J. THOMSON, M.D.

THOMAS HUNTER, M.D.

WILLIAM GLASGOW, M.B., Ch.B.

District Sanitary Inspector—

JOHN MILLAR.

Inspector of Buildings—

WILLIAM MARTIN.

District Meat Inspector, etc.—

ALEX. CAMERON.

LOCAL SANITARY INSPECTORS, &C.,	-	-	-	10
NURSE HEALTH VISITORS,	-	-	-	17
NURSE SANITARY INSPECTORS,	-	-	-	12
SUPERINTENDENTS OF SLAUGHTER-HOUSES,	-	-	-	7
ASSISTANT BUILDINGS INSPECTORS,	-	-	-	2

STAFF.

PUBLIC HEALTH HOSPITALS.

MIDDLE WARD DISTRICT.

Medical Officer—

J. HUME PATTERSON, F.R.F.P.S.(G.), D.P.H.

<i>County Hospital, Motherwell,</i> (232 beds)	- -	Dr. JOHN REID, Resident Physician-Superintendent. Dr. JAMES SHARPE, Resident Assistant Physician. Miss M. THOMSON, Matron.
<i>Lightourn Joint-Hospital, Shettleston,</i> (60* beds)	-	Dr. N. S. SETTEN, Resident Physician-Superintendent. Miss E. TOWNSEND, Matron.
<i>County Sanatorium, Stonehouse,</i> (60 beds)	- -	Dr. J. R. SUTHERLAND, Resident Physician-Superintendent. Dr. A. H. M'LEAN, Visiting Physician. Miss A. SHORE, Matron.
<i>County Sanatorium, Shotts,</i> (52 beds)	- -	Dr. D. R. HAMILTON, Physician-Superintendent. Dr. J. M'MILLAN, Visiting Physician. Miss ISA KEIR, Matron.
<i>County Sanatorium, Uppertown,</i> (46 beds)	- -	Dr. J. M'CALLUM LANG, Physician-Superintendent. Dr. RICHARD RAE, Visiting Physician. Miss E. C. STEWART, Matron.
<i>Hairmyres Colony,</i> (232 beds)	- - - -	Dr. JAMES JOHNSTONE, Resident Physician-Superintendent. Dr. ROBERT B. SMITH, Resident Assistant Physician. Miss M. LAIRD, Matron.
<i>County Maternity Hospital, Bellshill,</i> (48 beds)	-	Dr. H. J. THOMSON, Physician-Superintendent. Miss A. CRAWFORD, Matron.
<i>County Convalescent Home, - Calderbank House,</i> (30 beds)	- - -	Dr. THOMAS HUNTER, Physician-Superintendent. Miss C. M. JOHNSTONE, Matron.
<i>Blantyre Hospital,</i> (10 beds)	- - - -	Dr. WILLIAM GLASGOW, Visiting Physician. Miss J. H. LEE, Matron.
<i>Dalserf Hospital,</i> (10 beds)	- - - -	Dr. J. R. SUTHERLAND, Visiting Physician Miss H. J. MORE, Matron.

* 15 beds owned by the Middle Ward District Committee.

COUNTY OF LANARK.

DISTRICT OF THE MIDDLE WARD.

(Area, 184.611 acres.)

Report by the Medical Officer of Health

FOR THE YEAR 1927.

I.—Vital Statistics.

The **Area** of the District at the close of the year was **184,611** acres. A reduction arose through the extension of Airdrie Burgh boundary on 15th May, involving an extent of 326 acres, with an estimated population of 405, transferred from New Monkland Parish.

The acreage and population of each parish is stated in Table B.

The density of population was 1.28 persons to the acre.

The **population** at the middle of the year has been estimated, from local sources, at **236,000**, a thousand fewer than last year.

The number of inhabited houses in the District, according to the Valuation Roll, was **44,716**, a decrease of 272, compared with the year 1926. The number of uninhabited houses, according to the Roll, was 541, compared with 299 the previous year.

Statistical Tables.—Table A shows the birth-rate and death-rate per thousand of the population, and the infantile deaths per thousand births. It also shows the birth and death rates and infantile deaths for each year since 1921 and the average rates for the decennial periods between 1891 and 1920.

Table B shows the acreage, births, and deaths for the year in each parish and registration district, with the deaths classified according to cause, and Table C shows the deaths classified according to cause and age periods.

The **Births** registered numbered **5,640** — males, 2,879; females, 2,761—379, or 6.7 per cent., were illegitimate. The birth-rate per 1,000 of the population was **23.9**, which is the lowest rate ever recorded

in the Middle Ward District. The lowest rate previously recorded, viz., 25, occurred in 1926, and reference to Table A shows that for many years the rate has undergone an almost unbroken fall.

Deaths during 1927 numbered **2,649**, as compared with 2,618 in 1926, the respective death-rates for the two years being **11·2** and 11 per thousand. The deaths from measles were reduced from 71 to 19, and the deaths from all forms of tuberculosis were 31 less than in 1926. On the other hand, deaths from malignant diseases rose from 209 to 239, and pneumonia was responsible for 37 deaths more than in the previous year.

The deaths of infants under one year numbered 493, which is equivalent to 87·4 deaths per 1,000 births, as compared with 82·4 recorded last year. The deaths are referred to in detail in the portion of the Report dealing with Maternity and Child Welfare.

The number of births exceeded the deaths by 2,991, which constitutes the **natural increase** in population.

TABLE A.—BIRTH-RATES AND DEATH-RATES PER 1,000 OF THE POPULATION. INFANTILE DEATHS PER 1,000 BIRTHS.

Year.	Births.	Birth-rate.	Nett Deaths.	Death-rate.	INFANTS UNDER 1 YEAR.	
					Deaths.	Death-rate.
1891 } to 1900 }	62,323	39·1	29,080	18·1	8,098	129·9
1901 } to 1910 }	74,121	38·9	31,188	16·3	9,212	124·2
1911 } to 1920 }	68,201	32·5	30,005	14·3	7,547	119·4
1921	7,023	32·1	2,660	12·1	631	89·9
1922	6,364	28·3	2,936	13·0	650	102·1
1923	6,218	26·7	2,620	11·2	481	77·3
1924	6,251	26·3	3,023	12·7	620	99·2
1925	6,176	26·0	2,706	11·4	577	93·4
1926	5,928	25·0	2,618	11·0	489	82·4
1927	5,640	23·9	2,649	11·2	493	87·4

TABLE C.—MIDDLE WARD.—Year 1927.—Deaths classified according to cause and age periods, and corrected for Institutions, &c.

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Population, 236,000; Acreage, 184,611; Registered Births, { Legitimate, M., 2,683; F., 2,578; } Deaths under 1 year, { Legitimate, 478. }
 { Illegitimate, M., 196; F., 183; Total, 5,640. } { Illegitimate, 15. }

CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																				Rates per 1,000 Population.	Registered in Institutions in District.
					Weeks.					Months.					Years.											
					-1	1.	2.	3.	Total -4	1.	3.	6.	9.	Total -12	1.	5.	10.	15.	25.	35.	45.	55.	65.	75 and over.		
All Causes { Certified, - { Uncertified, -	2,472 1	381 1	205 1	2,648 1	157 ...	20 ...	22 ...	20 ...	219 ...	85 ...	78 ...	68 ...	43 ...	493 ...	186 ...	77 1	40 ...	131 ...	128 ...	164 ...	236 ...	348 ...	466 ...	379 ...	11-2203 0042	463 ...
Typhoid Fever, -	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	0084	1
Smallpox, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles, -	17	2	...	19	...	...	...	...	...	...	1	3	2	6	11	2	...	...	...	...	...	...	...	...	0805	3
Scarlet Fever, -	4	1	...	5	...	...	...	...	...	...	...	...	1	1	...	4	...	...	...	...	...	...	...	...	0211	3
Whooping-Cough, -	33	...	...	33	...	...	...	...	...	1	6	7	3	17	16	...	...	...	...	...	...	...	...	...	1441	3
Diphtheria, -	7	3	...	10	...	...	...	...	...	...	...	1	...	1	4	4	...	...	...	...	1	...	...	...	0423	6
Influenza, -	93	2	...	95	...	...	...	...	...	3	3	...	4	10	8	7	...	2	7	8	10	13	16	14	4025	8
Cerebro-Spinal Fever, -	10	...	...	10	...	...	...	...	...	...	1	3	...	4	4	...	...	1	1	...	...	...	...	...	0423	7
Erysipelas, -	5	...	1	4	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1	1	1	1	...	...	0109	4
Encephalitis Lethargica, -	8	1	...	9	...	...	...	...	...	...	...	...	...	...	1	1	...	3	1	...	3	...	...	...	0381	4
Tetanus, -	2	1	...	3	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	0127	2
Dysentery, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis, -	137	2	26	113	...	...	...	...	...	...	...	...	...	...	1	...	3	35	31	20	9	10	3	1	4788	61
Meningeal Tuberculosis, -	29	3	2	30	...	...	...	...	...	1	1	5	1	8	12	7	2	...	...	...	...	1	...	...	1271	11
Abdominal Tuberculosis, -	28	5	4	29	...	...	...	...	...	1	1	2	...	4	6	7	1	8	...	2	1	...	...	...	1228	7
Other Tuberculosis, -	14	3	2	15	...	...	...	...	...	...	...	...	...	...	3	2	2	5	...	2	1	...	...	...	0635	10
Septicæmia and Pyæmia, -	6	5	...	11	...	...	...	...	...	1	1	...	...	2	1	...	...	2	...	1	2	1	1	1	0466	3
Rheumatic Fever, -	10	1	...	11	...	...	...	...	...	...	...	...	...	...	...	1	4	3	...	1	...	2	...	...	0466	...
Malignant Diseases, -	191	58	10	239	...	...	...	...	...	...	...	...	...	...	...	...	...	6	3	22	51	65	63	29	1-0127	16
Measles (Simple), -	17	4	1	20	...	...	...	...	...	2	2	1	2	7	8	...	2	...	1	2	...	...	...	...	0847	1
Cerebral Hemorrhage, -	187	8	9	186	1	...	...	...	1	...	...	...	...	1	1	...	...	...	5	14	37	75	53	...	7881	12
Other Nervous Diseases, -	43	9	11	41	...	...	...	...	...	...	...	...	...	...	...	...	2	5	6	3	7	11	6	1	1737	14
Organic Heart Diseases, -	308	22	38	292	...	...	...	...	...	...	...	1	...	1	3	1	2	12	5	17	32	69	95	55	1-2364	59
Other Circulatory Diseases, -	53	6	5	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	22	22	...	2288	6
Bronchitis, -	140	7	6	141	...	2	2	2	6	5	7	4	3	25	10	1	1	...	3	4	5	21	44	27	5974	13
Pneumonia (All Forms), -	223	27	7	243	1	2	1	2	6	17	24	24	18	89	39	6	5	8	6	12	18	19	27	14	1-0296	54
Other Respiratory Diseases, -	31	2	1	32	1	...	...	...	1	1	1	1	...	4	3	...	...	1	5	3	5	5	2	4	1355	5
Diabetes, -	26	6	1	31	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	3	13	7	2	1313	1
Pericious Anæmia, -	20	4	1	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	6	8	4	1	0978	2
Diseases of Ductless Glands, -	8	5	1	12	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	4	4	2	...	0508	1
Appendicitis, Typhilitis, -	2	14	...	16	...	...	...	...	...	...	...	...	...	...	...	2	2	3	2	3	2	2	...	...	0677	1
Liver Diseases (not malignant), -	10	6	...	16	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	3	3	5	1	0677	...
Other Digestive Diseases, -	39	42	2	79	...	...	1	...	1	4	...	...	...	5	6	3	1	2	7	10	14	12	12	7	3347	5
Nephritis, Bright's Disease, -	53	15	5	63	...	...	...	...	...	...	...	...	...	...	2	3	...	3	3	8	15	10	15	4	2669	10
Dis. of Genito Urinary System, -	16	7	1	22	...	...	...	...	...	...	1	...	...	1	1	...	...	...	2	1	1	1	8	7	0932	4
Dis. of Female Genital Organs, -	6	6	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5	2	...	...	...	0508	1
Puerperal Sepsis, -	26	1	7	20	...	...	...	...	...	...	...	...	...	...	...	...	...	3	10	7	...	...	...	...	0847	25
Diseases and Accidents of Pregnancy, &c., -	15	2	4	13	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	6	1	...	...	...	0550	7
Congenital Hydrocephalus, -	3	1	1	3	1	...	...	...	1	...	1	...	...	2	...	...	...	...	1	...	...	...	...	...	0127	1
Congenital Heart Disease, -	18	...	1	17	7	2	1	...	10	2	...	2	...	14	1	...	...	2	...	...	...	...	...	...	0720	2
Congenital Malformations, -	16	4	1	19	8	5	2	...	15	3	...	...	...	18	1	...	...	...	...	...	...	...	...	...	0805	1
Infantile convulsions, -	33	...	...	33	4	1	1	...	6	6	8	3	2	25	7	1	...	...	...	...	...	...	...	...	1398	...
Diarrhea (under 2 years), -	46	1	4	43	1	...	1	2	4	8	10	7	2	31	12	...	...	...	...	...	...	...	...	...	1822	6
Premature Birth, -	122	1	8	115	94	4	5	5	108	7	...	...	...	115	...	...	...	...	...	...	...	...	...	...	4873	29
Injury at Birth, -	6	...	1	5	4	...	...	1	5	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	0211	4
Atrophy, D. and M., -	72	2	7	67	24	3	7	6	40	14	8	3	2	67	...	...	...	...	...	...	...	...	...	...	2838	17
Asphyxia, -	10	...	...	10	9	...	1	...	10	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	0423	1
Mallocation, Overlying, -	2	...	...	2	...	1	...	...	1	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	0084	...
Dis. of Early Infancy, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis, -	2	2	...	4	2	...	...	...	2	2	...	...	...	4	...	...	...	...	...	...	...	...	...	...	0169	2
Varicella, -	3	2	...	5	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	2	1	...	0211	2
Scalds, -	85	65	16	134	...	...	...	...	...	...	...	...	3	3	21	20	7	16	16	9	15	9	9	9	5677	2
Other Defined Diseases, -	4	1	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	0127	2
Undefined Diseases, -	170	19	16	173	...	...	...	...	...	1	1	...	...	2	2	2	3	1	3	1	7	1	34	117	7330	23
Undefined Diseases, -	63	3	4	62	...	...	...	2	2	3	1	1	...	7	2	2	2	2	1	3	3	17	13	10	2627	1
Total, -	2,473	382	206	2,649	157	20	22	20	219	85	78	68	43	493	186	78	40	131	128	164	236	348	466	379	11-2245	463

PUBLIC INSTITUTIONS SITUATED WITHIN THE DISTRICT WHERE SOME PERSONS NOT BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS ARE EXCLUDED.

Name of Institution	Parish where situated	Population. Police Census, 1927	DEATHS.	
			Total during 1927	Allocated to the Middle Ward District
Kirklands Asylum,	- Bothwell,	288	25	10
Hartwood Asylum,	- Shotts,	1,349	105	39
Airbles House,	- Dalziel,	147	3	1
Thrashbush Home,	- New Monkland,	112	21	6
Omoa House,	- Shotts,	197	41	28
County Hospital, Motherwell,	- Dalziel,	262	139	129
County Orthopædic Hospital, Stonehouse,	- Stonehouse,	115	4	3
County Sanatorium, Shotts,	- Shotts,	62	22	18
County Sanatorium, Uppertown,	- New Monkland,	73	19	18
Hairmyres Colony,	- East Kilbride,	303	2	1
County Maternity Hospital, Bellshill,	- Bothwell,	90	40	34
County Convalescent Home, Calderbank House,	- Old Monkland,	53	6	6
County Hospital, Blantyre,	Blantyre,	29	6	6
County Hospital, Dalserf,	Dalserf,	20	...	...
Blantyre Cottage Hospital,	- Blantyre,	3	5	5
St. Vincent Home for Deaf and Blind Children,	- Old Monkland,	247	1	1
* Maternity Home Hospital, Airdrie,	- New Monkland,	20	9	...
Collisden Nursing Home. Strathaven,	- Avondale,	18	4	1
Homœopathic Hospital, Mount Vernon,	- Old Monkland,	31	11	...
Total,		3,419	463	306

* This institution is situated in the area annexed by Airdrie Burgh, as from 15th May.

PUBLIC INSTITUTIONS SITUATED OUTWITH THE DISTRICT WHERE SOME PERSONS BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS ARE INCLUDED.

<i>General Hospitals.</i>		<i>Poor Law Institutions.</i>	
Glasgow Royal Infirmary,	- 167	41 Bothwell Road, Hamilton,	- 11
Glasgow Western Infirmary,	- 32	69 Hospital Street, Coatbridge,	9
Glasgow Victoria Infirmary,	- 13	Others, - - - - -	4
Edinburgh Royal Infirmary,	- 6		
Glasgow Sick Children's Hos- pital, - - - - -	41		
<i>Infectious Diseases Hospitals.</i>			
Lightburn Hospital,	- - 6	All other Institutions,	- - 55
Ruchill Hospital, &c.,	- - 8		
	<u>273</u>		<u>79</u>
<hr style="width: 100%;"/> TOTAL, 352			

DEATHS IN RELATION TO AGE AND CAUSE.—Table C shows the deaths classified according to age and cause. The deaths are here arranged in recognised age-periods, and the percentage proportion of deaths at each age-period is given :—

Infant period,	under 1 year,	493 deaths or 18·62 per cent.
Under school age,	1·5 years, -	186 „ 7·02 „
School age,	5-15 „ -	118 „ 4·45 „
Adolescent,	15-25 „ -	131 „ 4·94 „
Early mature period,	25-45 „ -	292 „ 11·02 „
Late „ „	45-65 „ -	584 „ 22·05 „
Post „ „	65 years and upwards, -	845 „ 31·9 „

Reference to Table A shows that the infantile mortality rate increased from 82·4 in 1926 to 87·4 in 1927, and that the general death-rate also showed an increase from 11 to 11·2 per thousand of the population in respect of those two years. If, however, the above table be compared with that for 1926, it will be found that, while the percentage proportion of deaths of infants under 1 year remained much the same, the percentage deaths at 1 to 5 years decreased considerably. The percentage deaths at the post-mature period increased appreciably.

Infectious Diseases.—The number of deaths due to infectious diseases which are compulsorily notifiable was 493, made up thus:—

Diphtheria, - - -	10	Tuberculosis (all other	
Erysipelas, - - -	4	forms), - - -	74
Scarlet Fever, - - -	5	Pneumonia, - - -	243
Typhoid Fever, - - -	2	Tetanus, - - -	3
Puerperal Sepsis, - - -	20	Acute Anterior Polio-	
Cerebro-spinal Fever,	10	myelitis, - - -	—
Pulmonary Tuberculosis,	113	Encephalitis Lethargica,	9

The deaths from infectious diseases not compulsorily notifiable amounted to 95:—Measles, 19; whooping-cough, 33; diarrhoea, 43. The prevalence of the various infectious diseases is further referred to in the second portion of the Report:—

Respiratory Diseases.—The deaths during the year numbered 511, and the following statistics show the deaths and deaths-rates of the various forms for the past five years:—

PNEUMONIA.			BRONCHITIS.			INFLUENZA.			OTHER RESPIRATORY DISEASES.	
Year.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Total Deaths.	
1923	195	0·84	123	0·53	38	0·16	29	0·12	385	
1924	319	1·34	163	0·68	122	0·51	33	0·13	637	
1925	220	0·92	140	0·59	55	0·23	29	0·12	444	
1926	206	0·86	142	0·59	88	0·37	35	0·14	471	
1927	243	1·03	141	0·59	95	0·40	32	0·13	511	

With regard to the 95 deaths from influenza, the disease was complicated with other conditions in 86 of the cases, as follows:—Pulmonary tuberculosis, 2; bronchitis, 19; pneumonia, 33; other respiratory diseases, 4; post-partum hæmorrhage, 1; other complications, 27.

Malignant Diseases.—The deaths falling under this heading numbered 239, as compared with 209 in the previous year. In 182 cases carcinoma was stated as the cause of death, in 11 cases sarcoma, and in 46 the nature of the malignant disease was not defined. The following table shows the distribution of the disease according to age and sex, and according to the organs and parts of the body affected:—

Age Period.	Sex.	Buccal Cavity.	Pharynx, Stomach, &c.	Peritoneum, &c.	Female Genital Organs.	Breast.	Skin.	Throat.	Lungs.	Kidney.	Bladder.	Prostate.	Testicle.	Cervical Glands.	Parotid Gland.	Mediastinum.	Femur.	Pelvis.	Brain.	* Others.	Total.	
-1 Year	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-5 Years	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5-10 "	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10-15 "	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15-20 "	{ M. F. }	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
20-25 "	{ M. F. }	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	2
25-30 "	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
30-35 "	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
35-40 "	{ M. F. }	—	1	1	1	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	5
40-45 "	{ M. F. }	—	2	2	2	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	7
45-50 "	{ M. F. }	—	3	1	2	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	4
50-55 "	{ M. F. }	2	9	3	2	3	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	6
55-60 "	{ M. F. }	1	6	3	6	5	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	15
60-65 "	{ M. F. }	—	3	3	3	2	1	—	1	—	3	—	—	—	—	—	—	—	—	—	—	9
65-70 "	{ M. F. }	1	6	2	3	1	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	20
70-75 "	{ M. F. }	1	5	5	3	1	1	1	—	—	1	3	—	—	—	—	—	—	—	—	—	18
75 years and over,	{ M. F. }	—	9	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14
All Ages, ...	{ M. F. }	6	39	36	23	15	1	3	5	1	4	3	1	1	1	1	1	1	2	5	2	239

* Includes neck, 3; thigh, 2; face 1; and groin, 1.

*Includes neck, 3; thigh, 2; face 1; and groin, 1.

Diabetes.

Deaths from diabetes numbered 31.

The following table classifies the deaths since 1920, according to age and sex groups:—

Age Period		1920	1921	1922	1923	1924	1925	1926	1927
1 - 5	M.	- —	1	—	—	—	—	—	—
	F.	- —	1	—	—	—	—	—	—
5 - 10	M.	- —	—	—	—	—	—	—	—
	F.	- —	—	—	—	—	—	—	—
10 - 15	M.	- —	—	—	—	—	1	—	—
	F.	- —	—	—	—	—	1	—	—
15 - 25	M.	- 1	—	—	2	1	—	3	—
	F.	- —	1	—	1	1	1	1	1
25 - 35	M.	- —	1	—	3	—	2	—	1
	F.	- 1	3	2	—	—	—	1	1
35 - 45	M.	- 1	1	—	1	2	—	—	2
	F.	- —	—	1	—	—	2	—	1
45 - 55	M.	- 4	—	—	2	—	—	1	—
	F.	- 1	1	3	1	2	2	3	3
55 - 65	M.	- 1	3	1	2	1	—	3	2
	F.	- 6	2	3	2	1	6	8	11
65 - 75	M.	- 1	1	3	2	—	2	—	1
	F.	- 2	1	1	6	5	5	4	6
75 +	M.	- 1	—	—	1	—	1	1	—
	F.	- 1	—	1	—	1	—	1	2
TOTAL,	M.	- 9	7	4	13	4	6	8	6
	F.	- 11	9	11	10	10	17	18	25
GRAND TOTAL,		- 20	16	15	23	14	23	26	31

In one of these cases insulin was being supplied by the Local Authority. It is not known whether, in the other cases, this form of treatment was being carried out by private arrangement or with assistance from the Insurance Committee or the Parish Council.

Supply of Insulin.—Insured persons and those in receipt of Poor Law medical relief are entitled to a supply of insulin from the Insurance Committees and Parish Councils, whilst those who do not come within the purview of these two Authorities are dealt with by the District Committee, under the Public Health (Amendment) Act, 1925.

The Middle Ward Scheme is limited to the supply of insulin to persons suffering from diabetes who are deemed to be in necessitous circumstances, and whose treatment is being supervised by a medical practitioner.

The following particulars relate to cases supplied with insulin during the year :—

Sex	Age	Date of first supply	Daily dose	Total amount supplied	Result
F.	48	30-4-26	7·21 units.	2,500	Very much improved.
F.	61	15 2-26	7·20 „	1,900	I. S. Q.
M.	28	23-2-27	20·40 „	8,500	Died.
F.	57	6-9-27	25 „	400	I. S. Q.
F.	36	19-8-27	30 „	3,900	Fairly good.

The three last named patients received Insulin for the first time during 1927.

II.—Prevalence of Infectious Disease.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group I includes diseases which are compulsorily notifiable (*a*) under the Notification Act, (*b*) by adoption under the Notification Act, and (*c*) by order of the Scottish Board of Health; and Group II, diseases not compulsorily notifiable. The diseases included in these groups are as follows :—

GROUP I.

(a)	(b)	(c)
Smallpox.	<i>August, 1906.</i>	<i>1st August, 1912.</i>
Diphtheria.	Cerebro-spinal Meningitis.	Pulmonary Tuberculosis.
Scarlet Fever.	<i>24th October, 1912.</i>	<i>1st July, 1914.</i>
Typhus Fever.	Tetanus.	All forms of Tuberculosis.
Typhoid Fever.	Anthrax.	<i>1st November, 1918.</i>
Puerperal Fever.	Glanders.	Ophthalmia Neonatorum.
Erysipelas.	Actinomyces.	<i>1st August, 1919.</i>
		Malaria.
		Dysentery.
		Trench Fever.
		Acute Primary
		Pneumonia.
		Acute Influenzal-
		Pneumonia.
		<i>21st December, 1925.</i>
		Infective Jaundice.
		Infantile Paralysis.
		Polio-Encephalitis.
		Encephalitis Lethargica.
		<i>25th March, 1927.</i>
		Chickenpox.

GROUP II.

Measles.	Ring worm.	German Measles.
Mumps.	Scabies.	Whooping-Cough.

TABLE E—NUMBER OF CASES OF INFECTIOUS SICKNESS RECOGNISED IN EACH PARISH DURING 1927.

Parish.	Smallpox.	Diphtheria.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Puerperal Fever.	Cerebro-Spinal Fever.	Infantile Paralysis.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Malaria	Dysentery.	Trench Fever.	Primary Pneumonia.	Influenza-Pneumonia.	Tetanus.	Encephalitis Lethargica.	Acute Infective Jaundice.	Chickenpox.	Total.	
1. Avondale,	—	16	3	10	—	—	—	1	—	1	1	9	6	—	—	—	14	1	—	—	—	—	4	66
2. East Kilbride,	—	1	—	19	—	—	—	1	—	—	2	5	5	—	—	—	11	2	—	—	1	—	1	48
3. Glasgow,	—	1	—	2	—	—	—	1	—	—	1	3	—	—	—	—	4	1	—	—	—	—	4	17
4. Stonehouse,	—	6	2	5	—	—	—	1	—	—	1	5	3	—	—	—	1	1	—	—	1	—	1	27
First Division,	—	24	5	36	—	—	—	4	—	1	5	22	14	—	—	—	30	5	—	2	—	10	158	
5. Blantyre.	—	29	18	37	—	1	1	11	2	—	15	25	44	—	1	—	96	16	—	6	—	50	352	
6. Bothwell,	—	169	43	160	—	2	—	25	6	1	48	116	108	—	—	—	563	38	1	16	1	278	1,575	
7. Cambuslang,	—	46	17	78	—	—	—	6	2	—	28	42	55	—	1	—	132	21	1	3	1	53	486	
8. Cambusnethan,	—	39	15	51	—	1	—	9	1	2	17	25	30	—	—	—	54	10	1	3	—	65	323	
9. Dalserf,	—	31	14	67	—	—	1	6	1	3	16	14	32	—	—	—	31	2	1	—	—	82	301	
10. Dalziel,	—	1	1	1	—	—	—	—	—	—	—	5	2	—	—	—	5	1	—	1	—	2	19	
11. Hamilton,	—	17	—	8	—	—	—	1	—	1	4	11	8	—	—	—	34	—	—	—	—	12	96	
Second Division,	—	332	108	402	—	4	2	58	12	7	128	238	279	—	2	—	915	88	4	29	2	542	3,152	
12. New Monkland,	—	32	4	40	—	1	—	5	—	—	5	15	29	—	—	—	32	12	—	1	—	25	201	
13. Old Monkland.	—	28	15	35	—	—	—	7	—	1	10	21	23	—	—	—	109	8	—	4	—	50	311	
14. Shotts,	—	47	21	32	—	3	—	8	1	—	26	24	47	—	1	—	70	10	—	1	1	77	369	
Third Division,	—	107	40	107	—	4	—	20	1	1	41	60	99	—	1	—	211	30	—	6	1	152	881	
Middle Ward,	—	463	153	545	—	8	2	82	13	9	174	320	392	—	3	—	1,156	123	4	37	3	704	4,191	
Cases notified in Institutions of persons belonging to other Areas,	—	—	3	—	—	—	—	1	—	—	7	18	2	—	—	—	3	—	—	—	—	—	—	34

The following are included in the list of regulations issued by the Scottish Board of Health during the year :—

- (1) The Public Health (Infective Jaundice) Regulations (Scotland), 1927, dated 4th February, making infective jaundice compulsorily notifiable until 31st December, 1927.
- (2) The Public Health (Chickenpox) Regulations (Scotland), 1927, dated 25th March, making chickenpox compulsorily notifiable until 30th September, 1927.
- (3) The Public Health (Chickenpox) Amendment Regulations (Scotland), 1927, dated 10th September, continuing the compulsory notification of chickenpox until 31st December, 1928.
- (4) The Public Health (Infectious Diseases) Regulations (Scotland), 1927, dated 21st December, dealing with (a) compulsory notification of certain forms of pneumonia, malaria, and dysentery; and (b) steps to be taken by the Medical Officer of Health in connection with cases of malaria, typhus fever, relapsing fever, enteric fever, and dysentery.
- (5) The Public Health (Infective Jaundice) Amendment Regulations (Scotland), 1927, dated 19th December, continuing the compulsory notification of infective jaundice until 31st December, 1932.

On 13th April a circular letter was issued by the Scottish Board of Health, drawing the attention of the Local Authority to the provisions of the Milk and Dairies (Scotland) Act, 1914, dealing with infectious diseases at dairies, and defining the duties of (a) the Local Authority, (b) the Medical Officer of Health, (c) dairymen, and (d) employees at dairies.

**Smallpox, Typhus Fever, Anthrax, Glanders, Actinomycosis,
Trench Fever, Malaria, and Polio-Encephalitis.**

No notification was received in respect of any of these diseases.

Diphtheria and Membranous Croup.

Table D1 shows the prevalence of diphtheria during the past five years and during each quinquennial period from 1891 to 1925 :—

DIPHTHERIA.

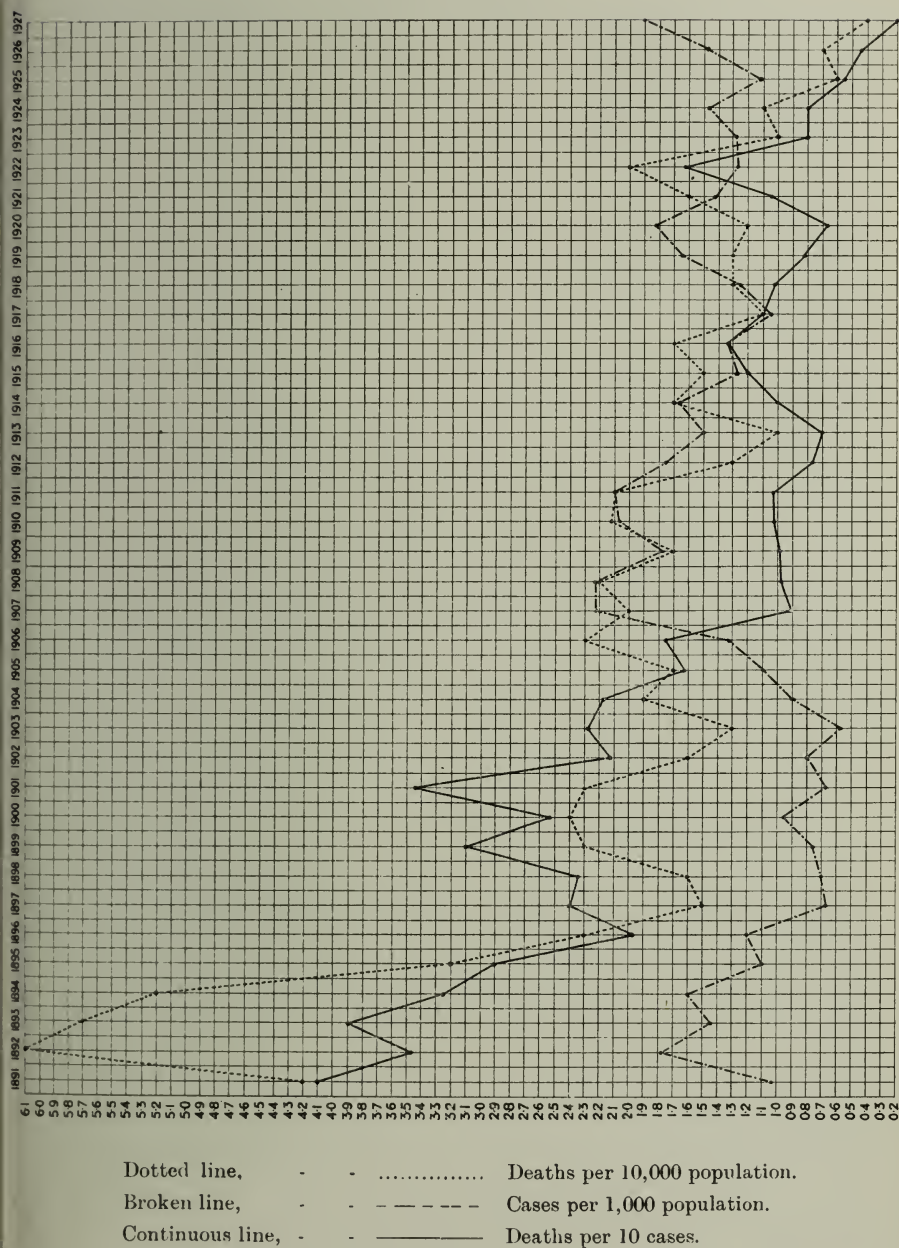


TABLE D1.

Year.	Cases Notified.	Deaths Registered.	Deaths per	Cases per	Deaths per
			100 Cases.	1,000 Population.	10,000 Population.
1891-95 (Average)	210	74	35.1	1.39	4.9
1896-1900	144	35	24.3	0.85	2.0
1901-05	151	34	22.3	0.80	1.8
1906-10	383	41	10.8	1.93	2.0
1911-15	336	32	9.9	1.63	1.5
1916-20	304	29	10.0	1.42	1.3
1921-25	303	29	9.6	1.31	1.3
1923	300	24	8.0	1.28	1.0
1924	348	28	8.0	1.46	1.1
1925	267	15	5.6	1.12	0.6
1926	355	16	4.5	1.49	0.7
1927	463	10	2.1	1.96	0.4

Although the number of cases of diphtheria is greater than ever previously recorded, the gratifying diminution in the number of deaths continues.

After admission to hospital the diagnosis was revised in 139 cases, as follows:—Positive swab, 86; sore throat, 30; scarlet fever, 6; whooping-cough, 4; naso pharyngitis, 2; measles, 1; nephritis, 1; ulcerated tongue, 1; tonsillitis, 1; Ludwig's angina, 1; glandular abscess, 1; quinsy, 1; pneumonia, 1; bronchitis, 1; tuberculous meningitis, 1; tonsillar abscess, 1. In addition, in 8 cases no evidence of diphtheria could be detected; in 3 cases the diphtheria was complicated with scarlet fever, and in 2 with whooping-cough.

The cases and deaths during each month and at certain age-periods are shown below:—

	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cases,	52	49	28	10	16	13	21	33	40	82	61	58	463
Deaths,	1	1	1	—	—	—	1	1	—	2	2	1	10
Ages,		-1	1-5	5-15	15-25	25-45	45-65	65+					All ages.
Cases,		6	124	273	38	18	4	—					463
Deaths,		1	4	4	—	—	1	—					10

The number of cases removed to hospital was 443, or 95.7 per cent. of the total.

Antitoxin was administered by private practitioners to 35 cases prior to their admission to hospital, and to 8 cases which were treated at home. 12 cases which were not removed to hospital received no serum, nor was it given to 408 cases before their admission.

During the year 184,000 units of antitoxin were supplied through police stations to medical practitioners. In addition to this, practitioners were supplied with 316,000 direct from the Public Health Department, or through local dispensaries. 300,000 units at the various police stations were replaced by a fresh supply of antitoxin.

The distribution of cases and deaths throughout the district is shown in Tables E and B respectively.

Scarlet Fever.

Table D2 shows the prevalence of scarlet fever during the past five years, and during each quinquennial period from 1891 to 1925.

TABLE D2.

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1891-95 (Average)	1,116	34	3.06	7.42	2.2
1896-1900	1,035	41	3.98	6.13	2.4
1901-05	645	25	3.90	3.44	1.3
1906-10	927	24	2.54	4.67	1.1
1911-15	1,179	29	2.43	5.70	1.3
1916-20	929	21	2.61	4.36	0.9
1921-25	1,168	22	1.9	5.07	0.9
1923	1,242	22	1.77	5.33	0.9
1924	979	18	1.83	4.13	0.7
1925	1,128	20	1.77	4.76	0.8
1926	877	11	1.25	3.70	0.4
1927	545	5	0.92	2.31	0.2

The number of cases notified shows an incidence considerably lower than that for the preceding quinquennial period; indeed, it is the smallest number recorded in any year since 1906. The notifications received each month averaged approximately 45, the actual number being below the average for the seven months from February to August inclusive, and above the average for the other five months of the year.

The predominating type of disease was mild, and many cases were so mild as to at first escape recognition. No common source of infection was discovered in any particular series of cases, infection being apparently conveyed by personal contact.

The number of cases removed to hospital was 502, or 92 per cent. of all the cases notified.

The age incidence of cases and deaths for the whole district was :—

Ages,	-	-1	1-5	5-15	15-25	25-45	45-65	All ages.
Cases,	-	8	145	327	45	18	2	545
Deaths,	-	1	—	4	—	—	—	5

“ *Return* ” Cases.—8 of the cases discharged from hospital during the year were apparently still capable of carrying infection, and gave rise to 9 “ *return* ” cases. Of the infecting cases, it was found that in 3 no departure from apparently normal health could be found, 1 had developed a nasal discharge, 1 a cold, 1 had swollen cervical glands, 1 had excoriation of nose, and in 1 desquamation was present on the feet.

The interval which elapsed between the dismissal from hospital of the infecting cases and the onset of illness in the “ *return* ” cases was as follows :—

Under 1 week.	1-2 weeks.	2-3 weeks.
3	4	2

Altered Diagnosis.—Of the 502 cases admitted to hospital, the diagnosis of scarlet fever was regarded as doubtful in 7 cases, while in 14 no evidence of the presence of scarlet fever could be detected. The diagnosis was revised in 36 other cases, as follows :—Sore throat, 15; measles, 2; diphtheria, 1; dermatitis, 1; enteritis, 4; influenza, 2; rhinitis, 1; urticaria, 1; naso-pharyngitis, 1; erythema, 4; septic throat, 1; chickenpox, 2; tonsillar abscess, 1. In 1 case the scarlet fever was complicated with diphtheria, in 3 cases with whooping-cough, and in 2 cases with chickenpox.

The distribution of cases and deaths is shown in Tables E and B respectively.

Typhoid Fever.

TABLE D3.

Year.	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1891-95 (Average)	465	56	11.95	3.0	4.2
1896-1900 „	350	45	12.73	2.0	2.6
1901-05 „	294	40	13.54	1.5	2.1
1906-10 „	206	19	9.40	1.0	0.9
1911-15 „	111	13	11.09	0.5	0.5
1916-20 „	86	11	12.74	0.3	0.5
1921-25 „	55	6	10.4	0.2	0.2
1923 - -	62	5	8.2	0.2	0.2
1924 - -	38	2	5.2	0.1	0.08
1925 - -	25	4	16.0	0.1	0.16
1926 - -	18	3	16.6	0.1	0.12
1927 - -	8	2	25.0	0.04	0.08

The incidence of typhoid fever continued to show a progressive diminution, although the fatality-rate was high.

The monthly and age incidence of cases and deaths was as follows :—

Month—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Cases, -	—	—	—	—	1	2	4	1	—	—	—	—	8
Deaths, -	—	—	—	—	—	—	2	—	—	—	—	—	2

Ages.	-	-1	1-5	5-15	15-25	25-45	45-65	All ages.
Cases,	-	—	—	4	2	2	—	8
Deaths,	-	—	—	—	1	1	—	2

7 cases (87·5 per cent.) were removed to hospital, and in 4 cases the diagnosis of typhoid fever was found to require revision. The altered diagnoses were as follows :—Abdominal tuberculosis, 1; meningismus, 1; post encephalitis, 1; and bronchitis, with constipation, 1. Deducting these cases, the number of actual cases of typhoid fever is reduced to 4. The distribution of cases and deaths is shown on Tables E and B respectively.

Continued Fever.

Two cases were notified—a boy of 10 years and an adult female. The former was admitted to hospital for observation. A specimen of blood subjected to the Widal test was negative, and the case finally proved to be one of broncho-pneumonia. In the second case the febrile condition cleared up in a very short time.

Cerebro-Spinal Meningitis.

Nine cases were notified, and 1 case admitted to hospital as encephalitis lethargica, and 3 as pneumonia proved to be cases of cerebro-spinal meningitis. Three patients died at home, and the others received hospital treatment. Eight patients died in hospital, the certified cause in one case being tuberculous meningitis. Of the two patients who recovered, the diagnosis was revised as follows :—Meningismus, 1; pneumonia, 1.

Puerperal Fever.

The number of cases notified was 83, and the number of deaths 20, as compared with 55 cases and 16 deaths the previous year.

The disease is dealt with fully in the Maternity and Child Welfare Section of the Report.

Erysipelas.

156 cases were notified, and 4 deaths registered. 48 cases were removed to hospital.

Ophthalmia Neonatorum.

181 cases, as compared with 169 in 1926, were notified. The disease is dealt with in the Maternity and Child Welfare Section of the Report.

Tetanus.

Three cases were notified during the year, and a fourth, a Middle Ward patient who died outwith the district, was discovered in the Registrar's returns. The three cases first referred to were removed to hospital. Two of the patients died; the third was discharged well after a period of 16 days' residence, no clinical evidence of tetanus having been found.

Dysentery.

Three cases were reported, namely, 2 females of about 50 years and a male of 69 years. One of the female patients was removed to hospital, but was discharged after 8 days' residence, the diagnosis being altered to diarrhœa. The male patient gave a history of having suffered from dysentery while serving with the Crown forces in South Africa in 1878, and again at Cawnpore in 1881, but no recurrence had taken place from the latter date until this year.

Acute Infective Jaundice.

Three cases were notified, 2 of which were removed to hospital. One patient, a male aged 55 years, died three days after admission, the certified cause of death being "Influenza: hepatitis: jaundice." The second case remained in hospital for a period of four weeks, and was discharged well, the revised diagnosis being "Jaundice." This latter patient was a coal miner, and arrangements were made for a bacteriological examination of rats from the colliery where he was employed. Two rats were obtained for this purpose, but the biological test for *Leptospira ictero hæmorrhagiæ* proved negative. The third patient, a boy of 8 years, was not removed to hospital; the Assistant Medical Officer was consulted by the medical practitioner in this case, and, after careful examination of the patient and inquiry into the history of the illness, it was decided that the patient had suffered from catarrhal jaundice.

Pneumonia.

1,282 cases of pneumonia were brought to the notice of the Department, 1,170 cases being notified; 70 were discovered from the Registrars' returns of deaths, and 42 others were not notified.

297 cases were removed to hospital.

Mortality.—The deaths due to pneumonia (all forms) numbered 243, giving a fatality-rate of 19 per cent., and a death-rate of 1·03 per 1,000 of the population. The following table shows the annual number of deaths and the death-rate per 1,000 since 1921 :—

	Year—1921	1922	1923	1924	1925	1926	1927
Deaths, -	189	301	195	319	220	206	243
Death-rate, -	0·86	1·33	0·83	1·34	0·92	0·87	1·03

The distribution of cases and deaths throughout the year are shown below :—

Month—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Cases, -	146	100	180	104	95	88	67	37	57	73	102	233	1,282
Deaths, -	30	18	33	20	19	20	10	7	5	16	20	45	243

The age-distribution of cases and deaths, together with the fatality-rate in each age group, are given in the following table :—

		All ages. - 1 1·5 5·15 15·25 25·45 45·65 65 and over.									
Cases	(Primary,	-	-	1,159	211	398	230	77	92	88	63
	(Influenzal,	-	-	123	1	20	19	22	25	19	17
Total,		-	-	1,282	212	418	249	99	117	107	80
Deaths, -		-	-	243	89	39	11	8	18	37	41
Fatality-rate, -		-	-	18·9	41·9	9·3	4·4	8·1	15·4	34·6	51·2

Of the 243 deaths from pneumonia, 89 had taken place before notification was received, 80 occurred in cases which were not notified at all, and of the remaining 74 the following tabular statement shows the day of illness on which notification was obtained :—

													Over
Day of Illness,	-	1	2	3	4	5	6	7	8	9	10	11	12 12 Total.
Fatal Cases													
Notified, -	-	-	—	4	6	11	9	7	7	8	6	3	4 1 5 74*

* In 3 deaths this information could not be obtained.

Information with reference to the day of illness on which each case was notified was recorded in 1,162 cases, as follows :—

													Died before Over Notifica- tion.
Day of Illness,	1	2	3	4	5	6	7	8	9	10	11	12 12	
Cases													
Notified, -	4	29	77	152	163	154	122	94	73	40	37	23 100 89	

Acute Anterior Poliomyelitis.

Five cases were notified, and 4 others were discovered at tuberculosis dispensaries.

Encephalitis Lethargica.

33 new cases were notified during the year, 3 others were discovered in the returns of deaths, and 1 case, admitted to hospital as enteric fever, proved to be suffering from encephalitis lethargica. 17 of these cases were admitted to Middle Ward institutions, together with 3 others which had been notified in previous years. In addition, 5 cases were admitted to Stobhill Hospital, Glasgow, or other special institutions, for special treatment, by arrangement with the Board of Health. 9 deaths were recorded during the year. With regard to the 17 cases admitted to our institutions, the diagnosis was revised in 11 cases, as follows: — Dementia, 2; neuresthenia, 1; cerebral hæmorrhage, 1; tuberculous meningitis, 2; pneumonia, 1; pneumococcal meningitis, 1; constipation, 2; necrosis of heart wall, 1. In 3 other cases no evidence of encephalitis lethargica could be found.

Diarrhœal Diseases.

The annual number of deaths and the death-rates per 1,000 of the population for each of the years 1923-1927 were:—

	1923	1924	1925	1926	1927
Deaths, - - -	73	67	53	43	43
Death-rate per 1,000, -	0·31	0·28	0·22	0·18	0·18

All the deaths were of children under 2 years of age, 31 being of infants under 1 year and 12 of children from 1 to 2 years, a decrease of 7 and an increase of 7 respectively, compared with the corresponding figures for 1926.

Measles.

The deaths from measles show a considerable decrease compared with the previous year.

The annual number of deaths and the death-rates per 1,000 of the population for each of the years 1923-1927 were:—

	1923	1924	1925	1926	1927
Deaths, - - -	45	151	13	71	19
Death-rate per 1,000, -	0·19	0·63	0·05	0·29	0·08

Whooping-Cough.

The number of deaths recorded during the year 1927 was 33, this being the second lowest number hitherto recorded.

The annual number of deaths and the death-rates per 1,000 of the population for each of the years 1923-1927 were:—

	1923	1924	1925	1926	1927
Deaths, - - -	67	80	131	25	33
Death-rate per 1,000,	0.28	0.33	0.55	0.10	0.14

44 per cent. of the deaths from measles and whooping-cough were of infants under 1 year of age, and 96 per cent. were of children under 5 years.

Ringworm.

64 cases of ringworm were brought under the notice of the Department, and 13 were treated with X-rays at the County Hospital, Motherwell.

Scabies.

During the year 130 cases were reported. 33 cases were treated in the County Hospital, Motherwell.

Venereal Diseases.

The County scheme for the recognition and treatment of these diseases includes the Middle Ward District, and the work done under the scheme is given in the County Report, along with the number of cases dealt with from each area at the various treatment centres.

School Closure.

It was not found necessary to recommend the closure of any school or department of a school during the year.

Anthrax.

Under the Diseases of Animals Act, 1894, 5 outbreaks of anthrax, affecting 5 cattle, were reported by the Inspector under the Anthrax Order. The outbreaks were distributed as follows:—Glasford, 1; Dalserf, 2; New Monkland, 1; Old Monkland, 1.

Institutions.

During the year 4,462 Middle Ward patients, and 442 patients from areas outwith the Middle Ward, were admitted to the various institutions, making a total of 5,494 admissions. The respective institutions are dealt with separately in another section of this Report.

The following statistical tables, F (a) and (b), give detailed information with regard to the admissions:—

TABLE F.—HOSPITALS AND SANATORIA. (a) PATIENTS ADMITTED FROM MIDDLE WARD DISTRICT.
(Admissions as notified.)

HOSPITALS AND SANATORIA.	NATURE OF CASES ADMITTED DURING YEAR.																									Total.
	Cases in Hospital at the beginning of year.	Admitted during year from the Middle Ward.	Discharged	Died.	Cases remaining in Hospital at the close of year.	Diphtheria.	Scarlet Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Puerperal Fever	Erysipelas.	Pneumonia.	Influenza.	Pulmonary Tuberculosis.	Tuberculosis. All other forms.	Veneral Diseases.	Ophthalmia Neonatorum.	Encephalitis. Lethargica.	Measles.	Whooping-cough.	Mothers.	Children.	Continued Fever.	Chickenpox.	Other Diseases.	
Motherwell, -	193	1,489	1,392	128	162	401	429	6	5	71	44	255	—	1	67	35	12	20	8	14	—	—	1	1	119	1,489
Lightburn, -	25	162	155	9	23	38	71	—	—	—	4	42	—	—	1	—	—	—	2	1	—	—	—	1	2	162
Shotts, -	47	113	91	18	51	—	—	—	—	—	—	—	—	79	34	—	—	—	—	—	—	—	—	—	—	113
Stonehouse, -	73	65	71	3	64	—	—	—	—	—	—	—	—	—	51	—	—	—	—	—	—	—	—	—	14	65
Longriggend, -	43	167	150	18	42	—	—	—	—	—	—	—	—	98	69	—	—	—	—	—	—	—	—	—	—	167
Hairmyres, -	188	191	244	—	135	—	—	—	—	—	—	—	—	78	113	—	—	—	—	—	—	—	—	—	—	191
Dalserf, -	16	20	20	—	16	—	—	—	—	—	—	—	—	—	19	—	—	—	—	—	—	—	—	—	1	20
Bellshill, -	55	1,630	1,607	35	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	990	640	—	—	1,630
Calderbank House, -	36	501	490	6	41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	205	296	—	—	—	501
Blantyre, -	14	124	125	6	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	59	—	—	—	124
TOTALS, -	690	4,462	4,345	223	584	439	500	6	5	71	48	297	—	256	354	35	12	20	10	15	1,260	995	1	2	136	4,462

TABLE F.—HOSPITALS AND SANATORIA. (b) PATIENTS ADMITTED FROM AREAS OUTWITH THE MIDDLE WARD DISTRICT.

AUTHORITY.	COUNTY HOSPITAL, MOTHERWELL.				COUNTY SANATORIA.					BELSHILL HOSPITAL.		CALDERBANK HOUSE.		BLANTYRE HOSPITAL.			
	Diphtheria.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	X-Ray.	Tuberculosis. All forms.	Veneral Diseases.	Other Conditions.	Shots.	Stonehouse.	Uppertown.	Hairmyres.	Dalsert.	Mothers.	Children.	Mothers.	Children.
Upper Ward, -	18	16	1	3	1	1	8	12	-	1	1	2	-	47	29	6	2
Lower Ward, -	1	-	-	1	-	-	5	3	-	-	-	1	-	40	27	13	1
Airdrie, -	-	-	-	6	-	-	2	1	5	-	3	3	-	1	-	-	-
Coatbridge, -	-	-	-	2	-	-	8	-	-	-	-	-	-	-	-	-	-
Hamilton, -	1	-	-	1	2	1	16	3	-	3	-	15	-	-	-	-	-
Motherwell and Wishaw, -	-	-	-	-	-	-	10	-	-	1	-	5	-	2	1	-	-
Rutherglen, -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Kirkintilloch, -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Peebles, -	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Ayrshire, -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Berwick, -	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
Dunbartonshire, -	-	-	-	3	-	-	-	-	-	1	-	7	-	-	-	-	-
Glasgow, -	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-
Greenock, -	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-
Lanark, -	-	-	-	-	-	-	-	-	-	-	-	-	-	27	15	1	3
Renfrewshire, -	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-
Military, -	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Totals, -	-	20	16	1	16	3	53	21	5	6	4	63	-	117	72	20	17
																4	3

Tuberculosis.

Mortality.—The deaths from all forms of tuberculosis numbered 187, viz.:—Pulmonary, 113; meningeal, 30; abdominal, 29; and other forms, 15. In the following table the deaths are classified in age periods:—

	Ages,	- 1	1-5	5-10	10-15	15-25	25-35	35-45	45-65	65 and over.	Total.
Pulmonary,	-	—	1	—	3	35	31	20	19	4	113
Meningeal,	-	8	12	7	2	—	—	—	1	—	30
Abdominal,	-	4	6	7	1	8	—	2	1	—	29
Other forms,	-	—	3	2	2	5	—	2	1	—	15
Total,	-	12	22	16	8	48	31	24	22	4	187

Death-rates. — The death-rates per 10,000 of the population were:—

	Pulmonary.	Meningeal.	Abdominal.	Other Forms.
1923, - -	6·3	2·2	1·8	1·2
1924, - -	5·5	2·5	1·8	0·7
1925, - -	5·6	1·6	1·9	0·5
1926, - -	5·2	1·3	1·4	1·0
1927, - -	4·7	1·2	1·2	0·6

The average quinquennial death-rates per 10,000 of the population since 1891-1925, and for the years 1926 and 1927, are shown in the following table:—

Years.	Pulmonary.	Non-Pulmonary.	All Forms.
1891-1895, - -	13·57	9·88	23·45
1896-1900, - -	11·44	9·11	20·55
1901-1905, - -	10·00	8·31	18·31
1906-1910, - -	8·83	8·56	17·39
1911-1915, - -	8·16	6·53	14·69
1916-1920, - -	7·57	5·28	12·85
1921-1925, - -	5·93	4·83	10·76
1926, - -	5·27	3·91	9·18
1927, - -	4·78	3·12	7·90

The interesting feature of the above table is the steady decline in the death-rates for tuberculosis, both pulmonary and non-pulmonary forms. The decline is all the more interesting when one considers the high standard of classification of death now existing. Taking a 30 years' period the rates show a remarkable reduction. In the quinquennium 1896-1900, the rates per 10,000 of the population were 11·44 for pulmonary and 9·11 for non-pulmonary tuberculosis, while

in the quinquennium 1921-1925, the rate for the pulmonary was 5·93 and for the non-pulmonary form was 4·83. The rates for the present year, viz., 4·78 for pulmonary and 3·12 for non-pulmonary, show a reduction of approximately 60 per cent. and 70 per cent. respectively when compared with the quinquennium 1896-1900.

Notification.—There were on record at the beginning of the year 1,473 cases of pulmonary and 1,806 cases of non-pulmonary forms of the disease, and during the year 338 new cases of the former type and 394 new cases of the latter were brought to notice, giving a total of 1,811 and 2,200 cases respectively. The following tabular statement shows the number of new cases notified by medical practitioners, and those not so notified, the latter being cases which came to the knowledge of the department for the first time through dispensaries, or from the Registrar's death returns:—

	Pulmonary.	Non-Pulmonary.
New cases notified, - - - -	268	278
„ „ not notified, - - - -	70	116
	<hr/> 338	<hr/> 394

The figure recorded for new cases coming to the notice of the Department for the year is the lowest for 10 years in the case of pulmonary tuberculosis, and for 7 years in the case of non-pulmonary tuberculosis. When we consider the number of Clinics opened in the Middle Ward and the number of people who attend these Clinics of their own accord, and are examined by the Tuberculosis Officers of the Department under the tuberculosis scheme, the reduction is remarkable. During the year 263 patients were sent to these Clinics by their own medical attendants, 171 were asked to attend by members of our own out-door staff, 8 were sent by the School Medical Authorities, 489 attended of their own accord, making a total of 931 examinations, 162 of which proved to have some tuberculous infection.

The new cases were dealt with as follows:—

	Pulmonary.	Non-Pulmonary.
Admitted to Sanatorium, - - -	141	163
Refused to go to Sanatorium, - -	71	69
Died before or soon after notification, -	66	55
Inmates of asylums, &c., - - -	4	1
Visitors or left district, - - -	10	9
Unsuitable for institutional treatment, -	14	21
Waiting treatment towards end of year,	11	21
Out-patient treatment at dispensaries and other institutions, - - -	21	55
	<hr/> 338	<hr/> 394

Where a patient receives both sanatorium and out-patient treatment during the year, the sanatorium treatment is shown in the above table in preference to the out-patient treatment.

Types of Non-Pulmonary Cases.—The 394 new cases are classified in the following statement according to the localisation of the principal lesion present at the time of notification :—

Cervical glands, - -	128	†Special organs, - -	19
Abdomen, - - -	129	Skin and sub-cutaneous	
*Bones and joints, -	66	tissue, - - -	4
Meninges, - - -	36	Lupus, - - -	7
General, - - -	5		—
			394

Distribution throughout District.—The parishes of residence are given in Table E.

Age, Sex, and Diagnosis.—The following table shows the new cases classified according to age, sex, and diagnosis. The diagnosis may not have been verified for a variety of reasons; *e.g.*, the patient may have been under observation for an insufficient period, may have refused examination, or the disease may have been found to be non-tuberculous :—

Pulmonary Tuberculosis.—338 cases notified.

	0-5	5-10	10-15	15-25	25-35	35-45	45-65	65 and over.	Total.	Diagnosis of Tuberculosis verified.
Males, -	6	22	11	30	34	33	27	6	169	88
Females,	5	23	18	48	31	26	17	1	169	75

Non-Pulmonary Tuberculosis.—394 cases notified.

	0-5	5-10	10-15	15-25	25-35	35-45	45-65	65 and over.	Total.	Diagnosis of Tuberculosis verified.
Males, -	80	52	28	25	12	6	7	1	211	132
Females,	64	49	28	24	10	3	5	—	183	113

* *Bones and Joints—Detailed.*—Spine, 11; Hip Joint, 18; Knee Joint, 12; Ankle Joint, 3; Elbow Joint, 4; Tibia, 1; Dactylitis, 6; Femur, 1; Temporal bone, 2; Malar bone, 1; Cranium, 1; Ulna, 2; Ilium, 1; Radius, 1; Sacro-iliac, 1; Mandible, 1.

† Eyes, 6; Kidney, 1; Testicle, 4; Uterus and appendages, 2; Abscess-chest wall, 2; Ischio-rectal abscess, 1; Bursa, 1; Mastoid, 1; Tongue, 1.

Statement showing cases where diagnosis was not confirmed, and the reasons. Altered diagnosis given in detail:—

PULMONARY TUBERCULOSIS.

	Males.	Females.
1. Cases not examined,	13	20
2. In Institution—established diagnosis pending,	15	12
3. Dispensary provisional diagnosis of tuberculosis for further observation,	27	25
4. Suspected tuberculosis—tuberculised, ...	7	13
5. <i>Altered diagnosis</i> —		
Anthraxis —acute bronchitis,	1	—
Debility following influenza,	1	—
Chronic bronchitis,	—	4
Dental sepsis,	—	1
Bronchiectasis,	1	—
Pulmonary fibrosis,	5	1
Bronchitis and emphysema,	2	—
Debility,	—	6
Empyema,	—	1
Bronchitis and asthma,	—	1
Malnutrition,	—	1
Asthma,	—	1
Auricular fibrillation,	1	—
Chronic pneumonitis,	1	—
Pulmonary congestion,	1	—
Simple laryngitis,	—	1
Tuberculosis—abdomen,	—	4
No apparent disease,	3	1
Died soon after notification,	3	2

NON-PULMONARY TUBERCULOSIS.

	Males.	Females
1. Cases not examined,	25	18
2. In Institution—established diagnosis pending,	10	15
3. Dispensary provisional diagnosis for further observation,	10	12
4. Suspected tuberculosis—tuberculised, ...	7	2
5. <i>Altered diagnosis</i> —		
Septic adenitis,	5	5
Cerebro-spinal meningitis,	—	1

	Males.	Females.
Arthritis of hip-joint (non T.B.),	1	—
Debility,	2	2
Gastro-enteritis,	—	2
Semi-membranous bursa,	1	—
Meteorism,	1	—
Toxic synovitis knee,	2	1
Acute carditis,	1	—
Infantilism,	1	—
Bronchitis,	1	—
Malnutrition,	3	3
Cold abscess (superficial),	1	—
Worms,	1	—
Whitlow,	1	—
Rickets,	1	1
Mastoiditis,	—	1
Tonsils enlarged,	—	1
Old trauma of spine and leg (non T.B.), ...	1	—
Broncho-pneumonia,	1	—
Arthritis, right elbow (non T.B.),	1	—
Pulmonary tuberculosis,	—	1
No apparent disease,	2	4
Left district soon after notification,	—	1

The following table gives the new cases classified in occupational groups :—

OCCUPATIONS.

Domestic Work—

	Pulmonary.	Non-Pulmonary.
Housewives,	62	16
Domestics,	21	13
Children,	16	156
Scholars,	72	150

Miners, &c.—

Miners,	51	21
Pithead workers,	8	3

Metal Workers—

Steelworkers,	10	2
Blacksmiths,	1	—
Engineers,	2	2
Moulders,	2	2
Others,	5	1

					Pulmonary	Non-Pulmonary
<i>Factory and Workshop—</i>						
Factory Workers,	...	...	...	...	2	1
Shoemakers,	...	...	...	...	3	1
Tailors,	...	...	...	...	2	1
Dressmakers,	...	...	...	...	3	—
Laundress,	...	...	...	...	1	1
Joiners,	...	...	...	...	2	2
Baker, ...	...	...	...	...	1	—
Shopkeepers,	...	...	...	...	4	3
<i>Stone or Brickworkers—</i>						
Brick workers,	...	...	...	...	2	1
Labourer	...	...	...	...	1	—
Miscellaneous,	...	...	...	...	35	12
No occupation,	...	...	...	...	32	6
					<u>338</u>	<u>394</u>

Duration of Illness.—The duration of illness according to patients' own estimate at time of notification was as follows:—

Months,	- 1	1-2	2-3	3-6	6-9	9-12	12-18	18-24	24 & over.	Not Known.	Total.
Pulmonary,	24	38	24	48	30	14	28	4	86	42	338
Non-Pulmonary,	88	65	31	49	32	9	34	12	63	11	394

It will be noticed from the above figures that a large number of the cases are not notified for a considerable period after the onset of symptoms.

Home Conditions.—The following tables show the number of apartments and types of houses occupied by the patients and their families:—

Pulmonary Cases—

Apartments.	Tenement.	Cottages.	Row.	Institutions.	Total.
1	32	7	41	—	80
2	68	14	51	—	133
3	18	41	5	—	64
4	4	12	2	—	18
Over 4	3	13	—	27	43
					<u>338</u>

Of the 338 cases recorded, 80 resided in houses of a single apartment, 133 of two apartments, 64 of three apartments, and 34 of four or more apartments, while 27 were institution cases. The total number of persons in each class of house, with the average number per house and per room, were :—

Apartments.	1	2	3	4 and over.
Total inmates, - - -	414	777	336	192
Average number per house,	5·17	5·84	5·25	5·64
„ „ per room,	5·17	2·92	1·75	under 1·41

Non-Pulmonary Cases—

Apartments.	Tenement.	Cottages.	Row.	Institutions.	Total.
1	44	6	64	—	114
2	119	20	42	—	181
3	26	30	5	—	61
4	2	23	1	—	26
Over 4	—	7	—	5	12
					394

Apartments.	1	2	3	4 and over.
Total inmates, - - -	651	1,152	395	209
Average number per house,	5·71	6·36	6·47	6·33
„ „ per room,	5·71	3·18	2·15	under 1·58

Institutional Treatment.—The following table shows the total number of all cases admitted and re-admitted to tuberculosis institutions. No case was sent to any institution outwith the County :—

Cases.	Shotts.	Stonehouse.	Uppertown.	Motherwell.	Lightburn.	Hairmyres.	Dalserf.
Pulmonary,	79	—	98	1	—	78	—
Non-Pulmonary,	34	51	69	67	1	113	19
	113	51	167	68	1	191	19

Sputa Examination.—Of the 338 cases notified for the first time, 102, or 30·1 per cent., gave a positive sputum result; 88, or 26·1 per cent., gave a negative result. In 148, or 43·7 per cent., no sputum examination was made, owing, *inter alia*, to many of these cases being children who had no cough or spit.

Family History of Tuberculosis.—Of the 338 pulmonary cases and the 394 non-pulmonary cases brought to notice during the year a family history of tuberculosis was obtained, as follows :—

	Cases with Tuberculosis in other members of family.	Cases with Tuberculosis in other relatives.	Percentage of cases with positive family history.
Pulmonary, - - -	96	34	28·4
Non-Pulmonary, - - -	79	33	20·0

Deaths in relation to Notification.—The table given below shows the deaths classified according to the time which elapsed between the receipt of notification and the occurrence of death, and also the deaths of unnotified cases:—

Year.	Total Cases.	Fatal Cases.		Fatal Cases Notified—Period between Notification and Death.				
		Unnotified.	Notified.	1 Month.	1-3 Months.	3-6 Months.	6-12 Months.	Over 1 Year.
1908	301	43	141	40	36	21	18	26
1909	338	52	155	36	33	27	25	34
1910	370	30	131	34	30	16	22	29
1911	336	24	161	31	30	20	29	51
1912	365	22	138	30	20	26	19	43
1913	369	26	150	35	27	30	31	27
1914	274	16	123	21	21	17	17	47
1915	327	20	144	32	21	16	25	50
1916	340	17	149	32	25	20	22	50
1917	289	31	127	20	18	18	23	48
1918	395	50	124	29	22	17	16	40
1919	366	21	125	29	23	21	21	31
1920	355	17	144	43	19	19	21	42
1921	379	10	129	27	28	17	17	40
1922	368	11	120	37	21	17	17	28
1923	422	11	136	37	25	29	15	30
1924	415	11	122	24	18	23	11	46
1925	393	8	125	21	34	16	15	39
1926	399	6	119	25	21	14	13	46
1927	338	6	107	22	14	19	13	39

The proportion of cases notified only a few months before death remains high.

Cases under Observation.—In spite of the removal of names from the register for various causes, the cases dealt with each year have been steadily increasing, and since 1919 the number has risen from 821 to 1,811 in the case of pulmonary tuberculosis, and from 813 to 2,200 for non-pulmonary tuberculosis.

Of the total number of 1,811 pulmonary and 2,200 non-pulmonary cases dealt with throughout the year, the following table shows the changes which took place:—

	Cases in District on 1/1/27.	New Cases.	Total on Register.	Left District.	Died.	Off list. Disease arrested or diagnosis revised.	Cases in District on 31/12/27.
Pulmonary,	1,473	338	1,811	125	152	191	1,343
Non-Pulmonary,	1,806	394	2,200	119	91	343	1,647
	3,279	732	4,011	244	243	534	2,990

STATEMENT SHOWING NUMBER OF PERSONS RESIDENT IN THE AREA AT 31ST DECEMBER, 1927, WHO WERE KNOWN TO BE SUFFERING FROM TUBERCULOSIS.

(Persons in Sanatoria, etc., included in the figures for the Area in which they have their home residence.)

		NUMBER OF KNOWN CASES								Total	
		Under 5	5 and 10	10 and 15	15 and 25	25 and 35	35 and 45	45 and 65	65 and upwards		
PULMONARY.*											
1. Tubercle	Bacilli	{ Males,	—	2	3	41	45	30	34	—	155
found, ...	...	{ Females,	—	1	2	35	24	23	10	—	95
2. Tubercle	Bacilli	{ Males,	14	108	102	116	100	84	80	6	610
not found, ...	...	{ Females,	15	107	107	97	64	57	34	2	483
NON-PULMONARY.†											
1. Abdominal,	...	{ Males,	55	84	44	28	3	3	—	—	217
		{ Females,	59	60	56	25	9	4	1	—	214
2. Spine,	...	{ Males,	7	7	9	9	5	—	2	—	39
		{ Females,	7	6	8	5	4	1	2	—	33
3. Bones and Joints	(exclusive of Spine),	{ Males,	18	37	42	39	12	7	9	1	165
	...	{ Females,	19	24	22	32	2	8	3	—	110
4. Superficial Glands,		{ Males,	47	89	84	58	26	4	8	—	316
		{ Females,	36	108	108	125	29	10	11	1	428
5. Lupus,	...	{ Males,	—	1	1	4	2	1	1	—	10
		{ Females,	—	4	5	3	1	3	—	—	16
6. Other parts	or	{ Males,	9	7	5	2	15	7	3	1	49
Organs,	...	{ Females,	8	13	8	4	9	4	4	—	50
TOTAL, ...			294	658	606	623	350	246	202	11	2,990

* Persons suffering from both pulmonary and non-pulmonary tuberculosis included under "Pulmonary" only.

† Persons suffering from multiple lesions classified according to the site of the principal lesion. No case included more than once in the return.

It should be noted that 15 pulmonary and 18 non-pulmonary cases died from some cause certified to be other than tuberculosis, viz. :—

Cases of notified tuberculosis dying and classified to causes other than tuberculosis :—

Pulmonary, 15 cases.—Fibrosis of lung, 1; acute bronchitis, 4; acute pneumonia, 1; hypostatic pneumonia, 1; influenza with

pulmonary tuberculosis, 2; influenza with bronchitis, 1; carcinoma with pulmonary tuberculosis, 1; diseases of the heart, 3; septicæmia, 1.

Non-Pulmonary 18 cases.—Acute bronchitis, 1; acute pneumonia, 1; pleurisy, child-birth, 1; osteomyelitis, broncho pneumonia, 1; influenza with tuberculous meningitis, 1; whooping cough with tuberculous meningitis, 1; meningitis, 1; infantile convulsions, 1; gastro-enteritis, 1; uræmia, 1; pernicious anæmia, 1; carcinoma, 1; puerperal fever, 1; syphilis, 1; cardiac disease, 1; senile gangrene, 1; burns, 1; fracture of skull, 1.

It is of interest to note that when tuberculosis appears as one of two causes of death, it is possible to find in the final classification that the other cause has taken preference; *e.g.*, tuberculosis in combination with malignant disease, measles, whooping-cough, or any of the diseases detailed in Groups 1 and 2 of the International List of causes of death.

Off List—

Pulmonary Tuberculosis, 191 cases.—In 121 instances the disease was arrested, and the patients had been free of symptoms for a sufficiently long period to justify the removal of their names from the register.

The diagnosis was altered as follows in 70 cases:—Chronic bronchitis, 13; debility and anæmia, 1; empyema (non-T.B.), 2; rachitic scoliosis, 1; debility, 9; pulmonary fibrosis (non-T.B.), 11; bronchiectasis, 2; cardiac hyperthyroidism, 1; dietetic errors, 1; gastro-enteritis, 1; basal fibrosis, 1; rheumatic carditis, 1; venereal disease, 1; under-nourished, 1; marasmus, 1; malnutrition, 1; chronic laryngitis and pharyngitis, 1; recurrent pneumonia, 1; dental sepsis, 1; chronic bronchitis and emphysema, 2; asthma, 1; adenoids, 1; rickets, 1; post influenzal debility, 1; no apparent disease, 13.

Non-Pulmonary Tuberculosis, 343 cases.—In 277 instances the disease was regarded as arrested, and in 66 the diagnosis was altered as follows:—Debility, 5; malnutrition, 8; rickets, 7; meningismus, 1; serous meningitis, 1; encephalitis lethargica, 1; septic adenitis, 6; arthritis (non-T.B.), 1; synovitis, 2; bursitis, 1; dental sepsis, 1; enteritis, 5; gastritis, 2; constipation, 1; worms, 1; chronic appendicitis with abscess, 1; nasal catarrh, 1; bronchitis, 4; pulmonary tuberculosis, 1; tonsils and adenoids, 1; scoliosis (non-T.B.), 1; ovarian cyst, 1; acute carditis, 1; whitlow, 1; no apparent disease, 11.

Duration of Illness at Death.—The table given below shows the fatal cases classified according to the total duration of illness:—

Duration.	MONTHS.							YEARS.						Un- known.	
	1-3	3-6	6-12	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10		
Pulmonary.	-	6	15	22	18	14	12	5	6	8	3	1	3	12	27
Non-Pulmonary,	-	41	12	6	10	5	5	3	1	1	2	—	—	4	1

Domiciliary Treatment.—Cases suitable for treatment at home, or who could not for some reason receive institutional treatment, were kept under observation by the Tuberculosis Officers and Nurse Inspectors, the latter of whom paid 23,387 visits during the course of the year.

During the year 226 cases received additional nourishment in the form of milk, eggs, butcher meat, and butter, at a total estimated cost of £926. In addition, supplies of malt and cod-liver oil were provided for those and other cases.

Out-Patient Clinics.

During the year two Health Institutes were opened—one at Cambuslang on 3rd March, and one at Shotts on 11th March, and the work which was formerly carried out in hired premises was transferred to these new institutes. An out-patient clinic was also commenced at the County Orthopædic Hospital, Stonehouse, on 8th January. These clinics afford the general public facilities for attending as out-patients, receiving advice and treatment of all minor ailments coming under the purview of the department. An out-patient clinic was also commenced on 13th June at the County Sanatorium, Shotts, for treatment under artificial sunlight only, the premises at the local Health Institute not having electric current available.

Table showing the work done at the clinics :—

	New Cases.	Re-attendances
COUNTY ORTHOPÆDIC HOSPITAL,		
STONEHOUSE—		
Minor operations, - - - -	250	93
X-ray examinations, - - - -	177	51
Consultations, - - - -	120	346
Artificial sunlight treatment, -	48	1,193
COUNTY SANATORIUM, SHOTTS—		
Artificial sunlight treatment, -	33	846
HEALTH INSTITUTE, CAMBUSLANG—		
Artificial sunlight treatment, -	70	1,160

Dispensary Treatment.—Five dispensaries—situated at Bellshill, Blantyre, Cambuslang, Larkhall, and Shotts—were in use, and the following table shows the record of the attendances :—

	New Cases.	Re-attendances.
Bellshill, - - - - -	255	2,351
Blantyre, - - - - -	80	1,056
Cambuslang, - - - - -	176	2,201
Larkhall, - - - - -	441	1,309
Shotts, - - - - -	191	1,652
	<u>1,143</u>	<u>8,569</u>

The new cases attending the dispensaries are classified in the following tables according to age, sex, and diagnosis, and the persons who recommended them to attend:—

TABLE SHOWING CASES CLASSIFIED ACCORDING TO AGE DIFFERENTIATING BETWEEN CASES NOTIFIED AND NOT NOTIFIED.

	0-5		5-15		15-25		25 and over.		Total.	
	Notified.	Not Notified.	Notified.	Not Notified.	Notified.	Not Notified.	Notified.	Not Notified.	Notified.	Not Notified.
Bellshill, -	9	43	24	91	14	21	23	30	70	185
Blantyre, -	8	11	12	30	3	4	5	7	28	52
Cambuslang, -	7	19	13	71	5	10	12	39	37	139
Larkhall, -	1	111	2	143	5	66	5	108	13	428
Shotts, -	13	22	21	72	10	12	20	21	64	127
Total. -	38	206	72	407	37	113	65	205	212	931

TABLE SHOWING ADULT CASES CLASSIFIED ACCORDING TO SEX, DIFFERENTIATING BETWEEN CASES NOTIFIED AND NOT NOTIFIED.

	Males.		Females.	
	Notified.	Not Notified.	Notified.	Not Notified.
Bellshill, -	-	22	15	14
Blantyre, -	-	4	4	5
Cambuslang, -	-	8	9	22
Larkhall, -	-	3	7	104
Shotts, -	-	18	12	19
Total, -	-	55	47	164

TABLE SHOWING NOTIFIED CASES CLASSIFIED ACCORDING TO NOTIFICATION AND PROVISIONAL DIAGNOSIS.

	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Non-Tuberculous.
	Notified.	Not Notified.	Notified.	Not Notified.	
Bellshill, -	-	31	30		9
Blantyre, -	-	6	17		5
Cambuslang, -	-	7	28		2
Larkhall, -	-	5	7		1
Shotts, -	-	23	40		1
Total, -	-	72	122		18

TABLES SHOWING CASES NOT NOTIFIED SENT TO THE DISPENSARIES BY DOCTORS IN THE DISTRICT, PUBLIC HEALTH STAFF, SCHOOL MEDICAL AUTHORITIES, OR CAME OF THEIR OWN ACCORD, CLASSIFIED TO TUBERCULOSIS—PULMONARY AND NON-PULMONARY, AND NON-TUBERCULOUS DISEASES.

By whom Sent	Type	Bellsbill	Blantyre	Cambuslang	Larkhall	Shotts	Total	Total
Sent by Doctors, -	Pulmonary, - -	27	1	5	2	11	46	263
	Non-Pulmonary, -	16	2	4	6	19	47	
	Non-Tuberculous, -	56	10	29	46	29	170	
Sent by Public Health Staff, - - -	Pulmonary, - -	1	—	3	1	1	6	171
	Non-Pulmonary, -	1	2	10	6	6	25	
	Non-Tuberculous, -	24	13	31	52	20	140	
Sent by School Medical Authorities, -	Pulmonary, - -	—	—	1	—	—	1	8
	Non-Pulmonary, -	1	—	—	—	—	1	
	Non-Tuberculous, -	4	—	—	2	—	6	
Came of own accord,	Pulmonary, - -	5	1	3	4	2	15	489
	Non-Pulmonary, -	3	7	3	6	2	21	
	Non-Tuberculous, -	47	16	50	303	37	453	

EAR, NOSE, AND THROAT AILMENTS.

1927.

No. of Sessions.	No. of 1st attendances.	No. of Re-attendances.	Operations recommended.	Operations performed
21	42	33	27	22

The operations performed were as follows:—

Tonsils and adenoids, - - -	14
Antral puncture, - - -	2
Cautery, - - -	3
Resection of septum, - - -	2
Uvula shortened, - - -	1
Total, - - -	<u>22</u>

One patient had a double operation:—Antral puncture and cautery. Two patients refused operation, and two were awaiting operation at the end of the year.

Recommendations for attendance at the Ear, Nose, and Throat Clinic were made as follows:—

Cambuslang Dispensary, - - -	16
Blantyre do. - - -	10
Shotts do. - - -	2
Longriggend Sanatorium, - - -	13
Shotts Sanatorium, - - -	1
Total, - - -	<u>42</u>

REPORT ON LIGHT TREATMENT AT CAMBUSLANG HEALTH INSTITUTE (TUBERCULOSIS SECTION).

EDGAR A. UNDERWOOD, M.A., B.Sc., M.B., D.P.H.

Artificial sunlight treatment was commenced at the Health Institute, Cambuslang, on 29th April, 1927. The installation used is a K.B.B., 250-volt, air-cooled mercury-vapour lamp. No hood was ordered with the apparatus; it was considered that, by dispensing with a hood, a number of children would be able to sit around the apparatus, thus effecting a considerable saving of time. In practice, however, this arrangement did not work well. At these clinics a large percentage of the patients are children under 6 years of age. Many of these children need to be induced by their parents to lie quiet, and it is difficult to keep them at a fixed distance from the source of light unless they are lying on their backs. It was found that, in general, if more than two, or at most, three, children were irradiated together, while lying on a couch side by side, it was exceedingly difficult to judge the approximate amount of light which the outside children were receiving. It was decided, therefore, to employ normal rays whenever possible, and, for this reason, patients are generally treated in pairs.

The following report covers the period from 29th April to 31st December, 1927, and the figures given are for this period of eight months:—

Total number of cases treated,	-	-	-	-	70
Do. do. re-attendances,	-	-	-	-	1,160
Do. do. attendances,	-	-	-	-	1,230

Of these 70 cases, 45 attended 20 or more sessions, and the following table summarises the results obtained:—

TABLE A.

Disease.	Cured.	Much Improved.	Improved.	I.S.Q.	Worse.
Cervical adenitis, - -	4	11	7	1	—
Abdominal tuberculosis, -	—	4	—	1	—
Multiple T.B. lesions (skin),	—	—	3	—	—
Hilus disease, - - -	—	1	3	—	—
Lupus of face, - - -	—	1	1	—	—
T.B. of hip joint, - - -	—	1	1	1	—
T.B. of foot and ankle, -	—	1	—	1	—
T.B. of elbow, - - -	—	—	1	—	—
Tuberculous sinus (face), -	—	—	1	—	—
Empyema sinus (T.B.), -	—	—	1	—	—

The attendances of the remaining 25 cases were very unsatisfactory, many had less than five exposures, and two attended only once. Of these 25 cases, one case of cervical adenitis was improved, the

remaining 24 were all I.S.Q., and were made up as follows:—

TABLE B.

Cervical adenitis,	-	-	-	-	-	17
Abdominal tuberculosis,	-	-	-	-	-	3
Hip, - - -	-	-	-	-	-	1
Ankle, - - -	-	-	-	-	-	1
Abscess of rib,	-	-	-	-	-	1
Serofuloderma,	-	-	-	-	-	1

As the attendance in this group was so short, the cases merit no further discussion.

Erythema Dose.—The erythema test was applied to the first cases treated after the installation of the lamp. Out of 15 cases in which the test was employed, two showed a moderate reaction with the 4-minutes' exposure, five showed a very faint and doubtful reaction at 4 minutes, and eight showed no reaction at all. Definite fine desquamation was not seen later over any exposed areas. It was concluded that the test was of little service in determining the initial exposure, and every case thereafter was given a commencing dose of 2 minutes' duration. No untoward results—such as severe erythema or constitutional symptoms—were experienced.

Exposure.—The earlier cases were exposed at a distance of 3 feet from the source of light, but it was found that at this distance progress was very slow. Accordingly the distance was reduced to 2 feet without ill effect, and the majority of the exposures are at this distance.

Generally, the initial dose of 2 minutes is increased fairly rapidly—*e.g.*, by about 2 to 4 minutes weekly—until a maximum of 20 minutes is reached. Absentees pay the penalty by having their exposures considerably reduced on return.

NOTES ON CASES IN TABLE A.

Cases of cervical adenitis did very well. Out of 23 cases 4 were definitely cured; and of the 11 cases who were "much improved," several showed on cessation of treatment considerable diminution in the size of the glands, and no sign of activity. Several cases of large single gland masses were met with, which, after commencing treatment, suddenly became fluctuant, and required incision or aspiration; thereafter they responded well to treatment.

Four cases had sinuses on commencing treatment, and none of them have done very well.

(a) I. L., 5 years, had two incisions in August, 1927; the sinuses are still (May, 1928), crusted, though the surrounding glands have cleared somewhat.

(b) W. W., a boy of 6 years, commenced treatment in May, 1927; he then showed two scars in the neck, the lower of which was leaking slightly. By the end of June the wounds were quite dry. He then went on holiday, and when he returned in August both wounds were discharging freely. Thereafter he attended for treatment very regularly. In September the discharge from the upper wound was very slight, but that from the lower wound was considerable; a gland had also developed between the two wounds. It was not until December that the wounds were quite dry. The scars are now (May, 1928) soft, but rather puckered.

(c) H. C., a girl of 15 years, showed, on first attendance in October, a discharging sinus in the neck. Treatment has been regular, but the discharge is still present. This patient is referred to below; she has several old-standing abdominal sinuses.

Large "Keloid" scars, left after previous incision, improved only slowly under treatment; but the scars left by small, recent incisions cleared up rapidly, the scar becoming soft and whiter, and any tendency to contraction being minimised.

The treatment of abdominal lesions was quite successful. Deep-seated glands seemed to disappear quickly under treatment; the peritoneal thickening was usually reduced; and the patients generally put on weight. The case which is tabulated as I.S.Q. shows several old-standing sinuses unhealed after operation; there is much matting of peritoneum.

Two cases of lupus (both of the dry, scaly type) were treated. One, a woman aged 45 years (included in the "improved" column of Table A), showed fairly severe lesions of the face. Her attendance was not entirely satisfactory, but the activity of the disease was arrested. The other case, a man aged 34 years, showed very active and widespread disease: the whole of the cartilaginous part of the nose had disappeared, and the lobule of the left ear was almost entirely eroded, the right ear being also severely affected; active disease covered the whole of the face below the level of the eyes and much of the anterior part of the neck. Under treatment the diseased tissues slowly healed, and the patient's friends have repeatedly remarked on the improvement in his facial appearance. He is still (May, 1928) under treatment. In these cases of lupus it has been found advantageous to give large doses at a distance of 1 foot 6 inches.

The treatment of bone and joint diseases was, on the whole, slightly disappointing. Cases which had recently developed sinuses did well; those with old-standing sinuses were much more refractory. Improvement of function in some of these cases was definite, but not striking.

The four cases included under "hilus disease" all showed enlargement at the roots and fibrosis, and all had symptoms of an asthmatic nature. During the treatment of these cases there was no sign of a "flare up" of an old lesion, but the cases were of course selected as showing no active lesion. In all four cases the period between successive "asthmatical" attacks gradually lengthened.

Weight.—A marked increase in weight was not an evident result of a prolonged course of treatment, but this fact was probably due in many cases to home conditions and lack of nourishment. One boy, aged 10 years, weighed 3 st. $2\frac{3}{4}$ lbs. in October, 1927, and is now (May, 1928), only 3 st. $4\frac{1}{4}$ lbs.; his attendance during this period has been very regular.

Deaths.—152 pulmonary cases and 91 non-pulmonary cases died. Of these, 82 and 62 respectively were of cases notified during the year.

The pulmonary death-rate for 1927 was 4·7 per 10,000 of the population, and the non-pulmonary, 3·1. The mortality for pulmonary forms is given in the following table, which shows the average annual number of deaths in each Registration District since 1891 :—

PULMONARY TUBERCULOSIS IN EACH REGISTRATION DISTRICT OF THE MIDDLE WARD.—AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS 1891-1925, AND FOR THE YEARS 1926 AND 1927.

Registration District.	Population. Census 1921.	1891-95.	1896-1900.	1901-05.	1906-10.	1911-15.	1916-20.	1921-25.	1926.
Avondale, -	5,902	10·2	7·4	5	7	4	3·3	2·4	1
East Kilbride, -	4,787	4·6	6·2	5·8	5·8	4·2	4·4	3·3	4
Glasford, -	4,131	1·4	·8	1·2	1·2	3	·6	1	1
Stonehouse, -	4,204	4·8	6·8	4·2	2	2·4	2·2	2	1
Blantyre, -	18,154	18·2	17·6	22·2	15·6	19·3	16·1	17·2	14
Bothwell, -	19,904	18	14·6	17·8	14	15·3	15·1	14·1	14
Bellshill, -	20,934	10·6	18	13·6	15·4	16	19	16·1	15
Holytown, -	18,579	13·4	11·4	13·4	16·8	13	14·1	8·3	14
Cambuslang, -	26,130	28·4	25·4	27	19·4	24·1	25	16·4	18
Cambusnethan, -	12,243	13·8	7·4	9·2	9·4	11·1	8	10·2	4
Calderhead, -	4,007	2·2	2·8	2·8	2·6	1·4	4	2·3	2
Dalserf, -	4,491	3·8	1·8	4·2	2·6	2·2	2·1	2·4	—
Larkhall, -	14,974	12	14·2	12·6	7·4	7·3	7·4	6	5
Dalziel, -	2,023	1·8	1·2	2·4	2·4	1·2	·8	1	2
Hamilton, -	7,921	11	6·8	6	6·8	5·2	3·3	3·3	5
New Monkland, -	13,773	14·6	18·2	11·6	14·2	9·2	7·4	5·3	8
Old Monkland—									
East, -	2,435	2·2	1·2	1·8	2	2	1·4	1·2	—
Coatbridge, -	2,910	2·8	2·6	1·8	2·6	2·3	1·4	1·1	1
West, -	13,415	15·6	12	9·8	11·2	10·4	8·1	7	7
Shotts—									
East, -	4,667	2·8	2·8	1·8	3	3	2·1	3·1	1
Middle, -	3,605	1·2	1·6	1·6	2·2	1·1	1	1·1	2
Calderhead, -	6,347	3	4·2	5·2	5·4	4·2	5·2	4·1	2
West, -	4,660	4·6	5·8	4·8	4·6	3·1	3	3·2	4
North, -	1,303	2·2	2·2	1·8	1·6	1·3	1·3	0·2	—
TOTAL, -	218,817	203·2	193	187·6	175	168·1	161	132·3	125

Discharged Tuberculous Soldiers.—Among the cases notified for the first time during 1927, were 8 discharged soldiers, all suffering from the pulmonary form of the disease. The relationship of the disease to military service is summarised, according to the Ministry of Pensions, thus:—Attributable to service, 1; aggravated by service, —; non-attributable, 1; undecided, 6.

Institutional treatment—in sanatorium or farm colony—was given to 3 cases; 1 case refused in-patient treatment, 1 case attended at out-patient clinic, 2 died soon after notification, and 1 was waiting treatment towards the end of the year.

The total number of ex-service men dealt with throughout the year as suffering from tuberculosis was 108. In addition to domiciliary visits made to those cases by the Tuberculosis Officers and attendances made by the men at the dispensaries, 415 home visits were made by Nurse Inspectors—*i.e.*, 1·7 per cent. of the total visits paid by them.

Institutional Treatment.—The work at the various institutions dealing with cases of tuberculosis is described by the respective Physician-Superintendents in the institutional reports.

Refractories Industries (Silicosis) Scheme, 1925.

Under “The Refractories Industries (Silicosis) Scheme, 1925,” as from 1st May, 1925, only initial examinations are carried out by the Tuberculosis Officers of the County of Lanark, subsequent examinations being carried out by the Medical Board set up under the scheme.

No initial examination were carried on under the above scheme during the year.

County Sanatorium, Shotts.

Physician-Superintendent—

D. R. HAMILTON, M.A., M.B., Ch.B., D.P.H.

*Visiting Physician—*JOHN MACMILLAN, M.B., Ch.B.

*Matron—*MISS KEIR.

Administration.

BUILDINGS AND GROUNDS.—These have escaped damage of any extent from the underground mineral workings, the only subsidence of note being in the central grass quadrangle, where the main outfall drain from the administration block was partially wrecked. Interference to the flow was such as to necessitate the complete relaying of some 50 feet of pipes.

The purchase of the remaining seams of coal underneath the Sanatorium feu is now under the consideration of the Committee. The question of purchase has become urgent, the Shotts Iron Company, Ltd., having intimated that their Main and Mill coal workings were proceeding in the direction of the Sanatorium. In respect of those seams under the existing buildings, and to a safe distance beyond the limits of the feu, no agreement has so far been reached.

A recreation hall, with ante-room and open verandah, was erected during the year. While the work in connection with this scheme has been completed, it has not been in use by the patients. To complete the scheme of recreation facilities, indoor and outdoor, the kitchen garden has been turfed and the recreation lawn extended up to the front of the hall, with the result that the hall, with verandah in front and facing south, overlooks a lawn of nearly a quarter of an acre in extent.

An emergency side-room has been provided on the left of the main entrance corridor of No. II Pavilion. This has been achieved by structural alterations to the existing building. On the opposite side of the same corridor the existing coal cellar was converted into a patients' cloak-room, and a new cellar erected just outside the doorway.

An extension of the administration block is now well advanced. This scheme, intended as additional accommodation for the maids, provides a dining-sitting room and store pantry on the ground floor, with entrance from the kitchen, and three bedrooms (one double and two single) upstairs.

Several minor repairs and improvements may also be recorded, viz., clearing drains and replacing dead trees in the plantation

opposite the Sanatorium, painting of front corrugated fence, painting and gilding of main gate, while an annual contract for the supply and delivery of house coal and boiler fuel has been arranged with the Shotts Iron Company, Ltd., at much more favourable rates than hitherto charged.

ACCOMMODATION.—Remains unchanged—46 beds and 8 cots. An emergency bed has been provided in the new side-room, Pavilion II, but this has not been added to the bed strength. It has been found necessary during the winter months to utilise this side-room daily as waiting accommodation for out-patients undergoing a course of lamp treatment. One emergency has occurred, when the bed has been used for a period of two weeks.

The cots in the nursery were considered in disrepair, and indeed of unsuitable type, and were replaced by a similar number of anti-accident type.

Of beds, 32 are allocated for males and 14 for females.

An out-patient clinic for artificial sunlight treatment has been established during the year. This clinic is accommodated in the Duty Room, No. II Pavilion. A detailed summary of the treatment undertaken is appended in another section of the Report

STAFF.—The medical staff is non-resident, and remains unchanged. Nursing staff:—Matron, 2 sisters, 4 staff nurses, and 6 probationers. The inauguration of the out-patient clinic in connection with the ultra-violet ray lamp necessitated the additional appointment of a trained nurse, whose duties are fully engaged with this treatment. Domestic staff:—1 cook, 1 laundress, and 7 maids. Outdoor staff:—1 gardener-attendant, 1 assistant gardener, and 1 fireman.

ADMISSIONS AND DISCHARGES.

Number of patients in residence at 1/1/27,	-	-	-	50	
„ „ admitted during year,	-	-	-	118	
„ „ discharged „ „	-	-	-	97	117
„ „ died „ „	-	-	-	20	
„ „ in residence at 31/12/27,	-	-	-	51	

PLACE OF RESIDENCE.—Of the total cases discharged, 109 resided in the District of the Middle Ward, the place of residence according to the parish being as follows:—

East Kilbride, - - - -	4	Dalziel, - - - -	1
Blantyre, - - - -	14	Hamilton, - - - -	6
Bothwell, - - - -	35	New Monkland, - - - -	6
Cambuslang, - - - -	7	Old Monkland, - - - -	11
Cambusnethan, - - - -	10	Shotts, - - - -	9
Dalserf, - - - -	6		

The remaining 8 cases were admitted from—

Dumbarton, . 2	Airdrie, - 5	Rutherglen, - 1
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AGE AND SEX.—In the following table the patients are classified according to their age group, sex, and type of disease diagnosed :—

Age Group	Sex		Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis	Tuberculised	Non- Tuberculous	Totals	
	M.	F.						
Pre-School, - - - 5 years, -	9	8	1	5	4	7	17	
School, - - - { -10 " -	4	5	1	2	2	4	9	
	3	1	—	1	1	2	4	
Adolescent, - - { -20 " -	6	9	10	3	—	2	15	
	10	4	9	5	—	—	14	
Early Maturity, - { -30 " -	3	6	9	—	—	—	9	
	12	4	11	5	—	—	16	
	8	6	13	1	—	—	14	
	7	1	8	—	—	—	8	
Late Maturity, - { -45 " -	3	1	2	—	—	2	4	
	5	2	5	1	—	1	7	
		70	47	69	23	7	18	117
		117		117				

DURATION OF RESIDENCE.—

	Maximum	Residence in Days		Average
		Minimum		
Pulmonary Tuberculosis,	690	2		145
Non-Pulmonary Tuberculosis,	522	2		112
Tuberculised,	107	50		83
Non-Tuberculous,	425	13		135

TRANSFERS TO OTHER INSTITUTIONS.—After observation, or at the end of their period of sanatorium treatment, 16 patients were transferred to other institutions, as follows :—

Hairmyres Colony, - - - -	11
Motherwell Hospital, - - - -	3
Stonehouse Hospital, - - - -	1
Dunbarton County Hospital, - - - -	1

Pulmonary Tuberculosis.

69 CASES.

DISTRIBUTION IN AGE GROUPS.—In the following table the age distribution of the fatal cases as against all cases is shown :—

	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	50	Total
All Cases, -	1	1	—	10	9	9	11	13	8	2	5	69
Fatal Cases, -	—	—	—	2	2	—	5	5	2	—	1	17

GENERAL RESULTS OF TREATMENT.—This table shows how patients in each age group responded to treatment, grouping, of course, being according to stage of disease on admission :—

Classification on admission	Number	Improved	Stationary	Deteriorated	Died
Group I, - - - -	15	13	2	—	—
Group II, - - - -	36	27	7	—	2
Group III, - - - -	18	—	2	1	15
Totals, - - - -	69	40	11	1	17

EXAMINATION OF SPUTA :—

Classification on admission	Number	Positive	Negative	No Sputum
Group I, . . .	15	9	4	2
Group II, . . .	36	23	11	2
Group III, . . .	18	16	2	—
Totals, . . .	69	48	17	4

PULMONARY TUBERCULOSIS IN CHILDREN UNDER 15 (2 GIRLS).—One, aged $3\frac{1}{2}$ years, had a history of bronchitis of five weeks' duration, loss of weight, and anorexia. Signs in chest suggested unilateral broncho-pneumonia. Tuberculin reactions were strongly positive, including a marked accidental Calmette's reaction. The child was taken home by parents after 20 days.

A girl of 8 years, with severe V.D.H. (mitral incompetence). The latter condition was sufficient in itself to explain the respiratory symptoms and general debility. A positive sputum, however, prior to admission could not be disregarded.

SPIT-NEGATIVE PULMONARY TUBERCULOSIS (21 CASES). — This number includes both girls mentioned above, also five others with positive spits in previous records. Of the latter number, three were old-standing cases of chronic phthisis, while the remaining two were early cases, one with definite crepitations (basal), and the other with a positive X-ray.

Six with positive X-ray had other confirmatory signs, as follows :—Hæmoptysis and crepitations, 2 ; crepitations and fever, 5 ; hæmoptysis alone, 2.

6, in whose cases no X-ray was available, were diagnosed in the following certain evidence :—Pleurisy and crepitations, 1 ; hæmoptysis and crepitations, 3 ; crepitations and fever, 1 ; pleurisy, hæmoptysis, and crepitations, 1.

In two cases it was found impossible to confirm diagnosis on the Trudeau criterion. Both these cases had suggestive symptoms and a history of indefinite pleurisy, but no other diagnostic signs were noted. These names were retained on the tuberculosis list for further observation.

Non-Pulmonary Tuberculosis.

23 CASES.

ABDOMINAL TUBERCULOSIS (7 CASES).—4 children and 3 adults.

One of the adults, a girl of 18, remained only five days in hospital. During that time she had fever, rapid pulse, and abdominal tumidity, and her general condition was somewhat emaciated. A young man was admitted in a condition of advanced plastic type of disease.

While relief was given to his most distressing symptoms, no nursing or therapeutic measure was able to check his gradual enfeeblement and death after four months. The third adult was also a young man, who ran a febrile course, with abdominal tumidity and ascites. He was discharged well after 118 days.

Two of the children had abdominal tumidity and suggestive symptoms, while they showed a marked sensitivity to tuberculin, as shown by Moro's and Von Pirquet's tests. Both were discharged well. The remaining two children were taken home by parents after five and twenty-seven days respectively. In neither case was the diagnosis confirmed or refuted. There was no marked abnormality, but history of symptoms was suggestive. Tuberculin tests, not repeated, were negative in one.

RENAL TUBERCULOSIS.—One case, that of a young man in whom the general toxæmic symptoms of fever, invested type, anæmia, and emaciation were marked. The actual disease was confined to the left kidney and bladder, and tubercle bacilli were easily demonstrable in the urine. While the disease seemed to be progressing, hopes were entertained of ultimate arrest and corresponding improvement in general health; but the patient could not be convinced of the necessity of rest in bed during the febrile phase, and left hospital of his own accord after 43 days. No amelioration of symptoms was noted.

CERVICAL GLANDS (1 CASE).—A girl of 4 years, who received hygienic treatment after repeated operations in Motherwell Hospital for gland abscesses. The glandular enlargement subsided, the discharge became arrested, and her general condition considerably improved, until a cough suspicious of whooping-cough developed, and it was deemed advisable to transfer her to Motherwell Hospital for isolation. She was readmitted later, but only remained two days.

SUB-CUTANEOUS ABSCESSSES (3 CASES).—One woman of 60 years was admitted from Motherwell Hospital, where a large diffuse left iliac and inguinal abscess was incised. There was a copious and foul-smelling discharge from the resultant sinus, while her general condition was extremely toxic and feeble. Further abscess formation occurred about the trunk, with increasing toxæmia, emaciation, and ultimately incontinence. Death took place after 57 days. Another woman of 35 years, with sub-cutaneous abscesses and general debility, failed to respond, and was discharged at her own request after 206 days. The prognosis in this case was hopeless, and death has occurred at home since. The third case was a young man, with sinuses and recurring abscesses. General debility in this case was also extreme.

A sudden hæmoptysis indicated pulmonary invasion, and tubercle bacilli were later identified in sputum. Operative measures necessitated transfer to Motherwell Hospital.

BONES AND JOINTS.—10 cases, grouped as follows:—Spine, 6; ankle joint, 2; elbow joint, 1; ilium, 1.

One patient, a pensioner, had three periods of in-patient treatment. In this case the disease was very advanced in the cervical vertebræ, with copious discharge, extreme deformity of thorax, and intense toxæmia. While the outlook here was hopeless from the outset, it was further complicated by an active and widespread pulmonary lesion. Death took place 14 days after the third admission. One other spinal case was admitted, with abscess formation over second left costal cartilage. The origin of this was detected as thoracic spinal caries, hitherto unsuspected. Pott's kyphosis was only just appreciable, and patient was transferred to Stonehouse for suitable orthopædic treatment. The remaining spinal cases were of old-standing disease, one with chronic sinus, the other without. Both were discharged much invigorated.

The ankle-joint cases were young adults, while the elbow-joint and ilium cases were children. These were all cases of discharging sinuses and general debility. In one instance the patient was transferred to Hairmyres, while the others were discharged home. In three, sinuses persisted. All were much improved in general health.

Tuberculised Children.

7 CASES.

These children had positive cutaneous tuberculin reactions—Moro's test and Von Pirquet's test—but no clinical signs of active tuberculosis.

Three of them were admitted as cases of pulmonary tuberculosis. These had a positive family history—one case, a little girl of two years, being a direct room contact. The actual conditions present were — delayed resolution following pneumonia, basal congestion following influenza and cough. Two were taken home by parents after almost complete recovery, while the third was transferred to Hairmyres.

The remaining four had histories of general and abdominal symptoms. One of these proved to be a very definite case of rickets, two cases of malnutrition, and the fourth, though a little under normal weight, appeared quite healthy while in residence. All were discharged much restored in general health and nutrition.

Non-Tuberculous Diseases.

18 CASES.

The following table shows diagnosis on admission, whether adult or child, and altered or established diagnosis in each case:—

Admitted as Pulm. T.B.		Admitted as Abdom. T.B.		Admitted as T.B. Knee-Jt.		Admitted as Gen. Symptoms of T.B.		Altered Diagnosis
Adult	Child	Adult	Child	Adult	Child	Adult	Child	
1	2	—	—	—	—	—	—	Chronic Bronchitis (3).
1	—	—	—	—	—	—	—	Chronic Bronchitis and Emphysema (1).
—	—	—	—	1	—	—	—	Toxic Synovitis (1).
—	—	—	1	—	—	—	—	Malnutrition and Enter- itis (1).
—	—	—	3	—	—	—	—	Gastro-Enteritis (3).
—	—	—	3	—	—	—	—	Malnutrition (3).
—	—	—	—	—	—	—	1	Debility and Anæmia (1).
—	1	—	—	—	—	—	—	Chronic Pneumonitis (1).
—	1	—	—	—	—	—	—	Pulmonary Fibrosis (1).
—	—	1	—	—	—	—	—	Neurasthenia (1).
1	—	—	—	—	—	—	—	Bronchiectasis (1)
—	—	1	—	—	—	—	—	No appreciable disease (1).

As may be seen, 13 cases were children, and in all of these the altered diagnosis was supported by repeated negative tuberculin reactions. Ten of them had varying periods of prolonged hygienic and dietetic treatment, and were restored to better health before discharge. The other three were taken home by parents after short periods of residence, and little improvement in health, if any, can be recorded.

Artificial Sunlight Treatment.

OUT-PATIENT CLINIC.

PREAMBLE.—TYPE OF LAMP.—The K.B.B. Sun Lamp, type “A,” suspension pattern, with the quartz atmospheric mercury vapour burner. The accessories consist of localiser with iris diaphragm, and localiser with quartz compressor.

Originally proposed for the Shotts Health Institute, and latterly, in June, 1927, established in the Sanatorium at a total cost of £100 (approximately). This form of therapy is administered to suitable resident patients and to out-patients from the Tuberculosis Dispensaries and Maternity and Child Welfare Centres in the neighbourhood. Sundry inquiries for treatment from other sources have been refused on the grounds that only such diseases as come within Public Health administration have a legitimate claim. Indeed, with the single lamp, the accommodation and staff as described in previous sections of this Report at our disposal, the Tuberculosis Scheme and the Maternity and Child Welfare Scheme provided wide and adequate scope for effective work.

The patients are selected in the dispensaries and centres and asked to attend at the Sanatorium clinic where, at the first visit, the individual erythema dose is determined and arrangements made for their future attendance twice or thrice per week, and at times as suitable as possible to the type of disease and to the patients' convenience. The nurse in charge is responsible for the actual treatment under the instructions of the Medical Superintendent. A record of treatment and progress is filed for each patient.

The sun bath or general irradiation is given from a distance of three feet, with the patient horizontal on a couch. Front and back are irradiated. The first exposure corresponds with the erythema dose, and the time is increased every second irradiation by one minute. The local treatment is done with the aid of the iris diaphragm or the quartz compressor, and the increase is half-a-minute every second irradiation.

While our experience with this type of therapy is as yet limited, it is considered a valuable addition to our treatment armamentarium, and maintains our resources in this respect abreast of modern developments.

The following table shows the number of patients dealt with and the total treatment given under Tuberculosis and Child Welfare Schemes, also the approximate total running cost of the treatment per hour, for the period under review :—

	No. of Patients commencing treatment	Total No. of Irradiations	Total Irradiations		Average Irradiations per Patient	Approximate running cost per hour
			General	Local		
Tuberculosis Scheme,	33	846	220 hrs.	72 hrs.		Current, 3d. per hour
			23 mns.	53 mns.	563 mns.	= £4 8s. 6d.
			Total, 293 hours, 16 mns.,			Nurse's salary, - £87 10s. Fire coal, - - £2 10s.
Maternity and Child Welfare Scheme, -	17	278	Total 60 hours, 44 mns.,		214 mns.	—
Totals, - -	50	1,124	354 hours		777 mns.	£94 8s. 6d. or 5s. 4d. per hour.

DISEASES DEALT WITH.—It will be convenient to consider these under the headings "Tuberculosis Scheme" and "Maternity and Child Welfare Scheme."

PATIENTS UNDER THE TUBERCULOSIS SCHEME (33 CASES).—Total attendances, 846.

The following table shows the types of diseases dealt with, and the progress made under treatment:—

Diseases	Total No. of Cases commencing treatment	Treated and Discharged					Treatment discontinued by Patient before completion		Continuing treatment
		Total	Cured	Imp.	I. S. Q.	Worse			
T.B. Glands, with sinus, -	7	4	3	—	1*	—	—	—	3
Enlarged T.B. Glands, -	5	—	—	—	—	—	1	—	4
T.B. Peritonitis, with sinus, -	2	1	1	—	—	—	1	—	—
Abdominal T.B., -	2	1	—	—	—	1†	—	—	1
Lupus Vulgaris, -	6	—	—	—	—	—	—	—	6
Lupus Erythematosus, -	1	—	—	—	—	—	—	—	1
T.B. of Bones and Joints, -	3	—	—	—	—	—	—	—	3
T.B. Keratitis, -	1	—	—	—	—	—	—	—	1
General Debility with—									
Bronchitis, -	2	—	—	—	—	—	—	—	2
Goitre, -	1	—	—	—	—	—	—	—	1
Dermatitis, -	2	—	—	—	—	—	—	—	2
Anæmia, -	1	—	—	—	—	—	—	—	1
Total, -	33	6	4	—	1	1	2	—	25

* A boy, aet. 15, with T.B. in old cervical scar. No improvement noted after 12 irradiations, general and local, or 81 minutes, total irradiations. As the boy was anxious to return to work, excision of scar was recommended.

† Treatment discontinued on advice of local doctor, who thought the treatment "too strong for child." Seven irradiations, and 23 minutes total irradiations. The child, aet. 1½ on commencing treatment was emaciated (weight 21 lbs.), with slightly tumid abdomen, and thin persistent watery diarrhoea.

TUBERCULOUS ADENITIS WITH SINUS.—The three cases in which the maximum result is recorded were cases of cervical adenitis. The condition as on commencing treatment had persisted for two years, fourteen months, and eight months respectively, and the total irradiations in the same order respectively was 268 minutes' general and 140 local, 47 minutes' general and 23 minutes' local, 98 minutes' general and 49 minutes' local.

Generally, the result of ultra-violet irradiation in these cases was first of all an increase in amount of discharge. This was actually observed during the course of irradiation. As the treatment progressed, with the gradual diminution of discharge, the infected skin edges assumed a more healthy appearance, the underlying adenitis tended to subside, and the scar eventually healed. The general condition of the patients improved coincidentally.

TUBERCULOUS PERITONITIS WITH SINUS.—One case cured. The sinus in this case, of two weeks' duration, was at site of an old appendectomy scar. 18 irradiations, totalling 175 minutes' general and local, brought about a complete arrest of discharge and a healthy scar.

MATERNITY AND CHILD WELFARE SCHEME (17 CASES).—278 total attendances. The treatment in these cases was confined wholly to

general irradiation. The following table shows the types of diseases dealt with, and the progress made under treatment:—

Diseases	Total No. of Cases commencing treatment	Treated and Discharged					Treatment discontinued by Patient before completion	Continuing treatment	
		Total	Cured	Imp.	I. S. Q.	Worse			
Malnutrition with—									
Anæmia, - - -	3	—	—	—	—	—	2	1	
Vomiting - - -	1	1	—	1	—	—	—	—	
Gastro-Enteritis, - - -	5	—	—	—	—	—	2	3	
Intertrigo, - - -	1	1	1	—	—	—	—	—	
Rickets, - - -	3	—	—	—	—	—	1	2	
Eczema, - - -	2	1	1	—	—	—	—	1	
Post Operative Debility, - - -	1	1	1	—	—	—	—	—	
General Debility, - - -	1	—	—	—	—	—	—	1	
Total, - - -	17	4	3	1	—	—	5*	8	

* In three of these cases, one of Rickets and two of Malnutrition, the treatment actually given averaged 20 irradiations or 136 minutes' total irradiation, and very definite increase of weight and amelioration of symptoms were noted.

Of these cases treated and discharged, the following notes are a summary of particulars:—

MALNUTRITION (2 CASES).—One of these in whom a cure is tabulated, received 26 irradiations or 168 minutes' total irradiations, over a period of five months. The child gained 6 lbs. 10 ozs., the intertrigo healed leaving a perfectly healthy skin and coincident symptoms of dyspepsia were very much relieved. The other child, æt. 7 months, started treatment on 23/6/27, and received 16 irradiations, or 88 minutes' total irradiations, over a period of two months. Weight increased by 5½ lbs. and vomiting was much improved.

ECZEMA (1 CASE).—Severe infantile eczema of face and head; 32 irradiations and 275 minutes' total irradiation; duration of treatment, 5 months. The condition had peristed for 15 months prior to undergoing artificial sunlight treatment. Local inunction was persisted with throughout. The sole vestigium of the eczema at the completion of treatment was a mild scaly erythema of malar prominences. The child's general condition was much improved and his weight increased.

POST-OPERATIVE DEBILITY (1 CASE).—Æt. 1 year 9 months, operated on for hydrocele of cord — resultant condition for two months prior to treatment—anorexia, malaise, and not thriving or

walking. 31 irradiations, 261 minutes' total irradiation, and duration of treatment, 2 months. The child regained a vigorous appetite, commenced walking after a few irradiations and finally became active and robust, the result more than justifying the record of a "cure."

Special Examinations and Treatment.

DENTAL TREATMENT.—Mr. Smith, Airdrie, continues as visiting dentist. He made four visits to the Sanatorium during the year. Patients treated numbered 27; extractions, 76; and scalings, 6.

EAR, NOSE, AND THROAT CLINIC. — One examination was made by Dr. Adam. This girl suffered from aphonia. No pathological condition was detected.

X-RAY EXAMINATIONS. — Of the patients discharged during the year, 25 were X-rayed at Motherwell Hospital, the examinations being necessary for diagnostic reasons.

In conclusion, grateful recognition is made of the services of the local ministers and R.C. clergy throughout the year. Also of the frequent concert entertainments to patients, voluntarily provided by local concert parties.

County Orthopædic Hospital, Stonehouse.

Resident Medical Officer.—J. R. SUTHERLAND, M.B., B.Sc., D.P.H.

Visiting Physician.—ALEX. MACLEAN, M.B., Ch.B.

Visiting Dentist.—J. HAY CAMPBELL, L.D.S.

Matron—ANNIE SHORE.

BUILDINGS AND GROUNDS.—The former were kept in repair largely through the good offices of the Works Department.

Of the few changes made in the grounds the main one consisted in extending the road constructed last year by the County Road Surveyor's men, and leading from the older buildings to the front of the Treatment Pavilion. This road was continued by our gardeners to encircle that pavilion, and allow ambulances to approach and leave it with ease. The surface of the extended portion, meantime composed of ashes, would be more durable, and conform better with the rest of the roads of the hospital if finished with tarmacadam.

STAFF.—Numerically the staff is unaltered, the female consisting of 1 matron, 5 trained sisters, 15 probationers, 1 cook, 1 laundrymaid, and 12 maids; and the male of 1 visiting physician, 1 resident medical officer, 1 visiting dentist, 1 engineer, and 3 gardeners.

There still unfortunately persists the grossly overcrowded state of the Nurses' Home, with all its insanitary associations and attendant difficulties for the matron, who has to supervise a staff, the members of which reside, some in the Home and some in two houses in Stonehouse at considerable distances from the hospital.

This subject, along with that of the overcrowding of the wards generally, was discussed more fully in the Annual Reports of 1925 and 1926, and is again referred to lest it might be concluded that the difficulties inherent in the existing scheme of accommodation for patients and staff had some way or other been overcome in the interval.

Since the opening of the Treatment Pavilion and the cultivation of the land in its vicinity the work of the male staff has greatly increased, particularly that of the engineer, who, it is now apparent, cannot attend to the new plant, on which the efficiency of the X-ray and sunlight apparatus depends, as well as satisfactorily perform

his ordinary duties. As there is ample work for a handyman to assist the engineer and gardeners as required, it is hoped that one will shortly be engaged.

PATIENTS.—These are again dealt with under the headings of Indoor and Outdoor Patients.

INDOOR PATIENTS.—71 were admitted during the year and 77 dismissed. As shown below their place of residence was, with three exceptions, in the Middle Ward of Lanark.

TABLE I.

Parish.	Number of Patients.	Parish.	Number of Patients.
Avondale, - -	2	Glassford, - -	1
Blantyre, - -	9	Hamilton, - -	2
Bothwell, - -	19	New Monkland, - -	3
Cambuslang, - -	7	Old Monkland, - -	4
Cambusnethan, - -	5	Shotts, - -	4
Dalserf, - -	15	Stonehouse, - -	1
East Kilbride, - -	2		—
		Total, - -	74
BURGH.			
Hamilton, - - - - -	-	-	3
			—
		Total, - -	77

TABLE II.
AGE AND SEX DISTRIBUTION.

Years.	Male.	Female.	Total
- 5	7	6	13
- 10	10	8	18
- 15	7	3	10
- 20	6	11	17
- 25	3	4	7
- 30	2	3	5
- 35	3	—	3
- 40	1	—	1
- 45	—	1	1
- 50	—	1	1
- 55	1	—	1
Total,	40	37	77

Non-Tuberculous Disease.

Nine patients were found to be suffering from non-tuberculous disease.

No. of Case	Sex	Age in Years	Disease	Treatment	Result]	Residence in Days	Remarks
1	M.	26	Exostosis in knee-joint (femur).	Excision of Exostosis.	Well	26	—
2	F.	21	Tearing of internal semi-lunar cartilage.	Excision of cartilage.	Well	21	—
3	F.	17	Sarcoma of glands of neck.	Excision of part for examination.	I.S.Q.	36	Since died.
	M.	4	Rickets.	Sunlight, &c.	—	20	Attending out-door department.
5	M.	4½	Phimosis.	Circumcision.	Well	5	—
6	F.	16	Spinal scoliosis.	Exercises.	Imp.	166	—
7	M.	6	Osteo-chondritis of the superior epiphysis of the femur.	Immobilization of hip-joint.	Well	327	—
	M.	4½	Traumatic arthritis of elbow-joint.	Massage, &c.	Well	68	—
	F.	25	Flexion of knee-joint and contraction of hamstring muscles due to chronic arthritis.	Tenotomy of hamstrings.	Well	306	—

Tuberculous Disease.

In 68 patients the diagnosis of tuberculous disease was corroborated.

It is endeavoured to give hereafter as concisely as possible in tabular form the essential details regarding the disease from which they respectively suffered.

TABLE IV.

SPINE.

Region	Case	Age	Duration of Illness	Past Treatment	Condition on Admission	Result of Treatment					Remarks
						Cured	Imp.	L.S.Q.	Worse	Died	
DORSAL.	1 M.	1½ years.	6 weeks.	Outdoor at Royal Hospital for Sick Children, Glasgow.	Mid-dorsal caries, with slight bending.	1	..	..	..	..	Slight deformity.
	2 M.	7 "	8 "	Outdoor at Royal Infirmary, Glasgow.	Mid-dorsal caries. No deformity.	1	..	..	..	..	No resultant deformity.
	3 M.	30 "	23 years.	Indoor at Royal Infirmary. 23 years ago. Disease relapsed 3 years ago.	Poor. Marked dorsal curvature with lumbar abscess.	1	..	..	..	..	Transferred to Hairyres Colony for occupational training.
	4 F.	2½ "	5 months.	Outdoor at Royal Hospital for Sick Children, Glasgow.	Slight upper dorsal curvature.	1	..	..	..	..	—
	5 F.	6 "	3 years.	—	Dorsal caries and collapse. All dorsal vertebrae affected. Paraplegia.	..	1	..	..	..	Dismissed with spinal lesion apparently cured, but paraplegic and incontinent.
	6 F.	14 "	7 "	Indoor at County Hospital, Motherwell.	Mid-dorsal curvature.	..	1	..	..	..	Patient had numerous other lesions, <i>e.g.</i> , of both elbow, ankle, and wrist-joints, etc. Recommended holiday at seaside for 1 month. Re-admitted at expiry of that time. Now under treatment.
	7 F.	18 "	3 "	Lightburn Hospital.	Mid-dorsal caries, with paresis of legs.	1	..	..	..	..	Dismissed well. Recovery of power of legs.
	8 F.	23 "	1 "	Outdoor at Royal Infirmary, Glasgow.	Upper dorsal caries, with slight angulation.	1	..	..	..	..	Developed a paravertebral abscess while under treatment. Healed under

regions.		Lumbar caries.		Refused treatment. Re-admitted and now under treatment for lumbar caries and psoas abscess.	
LUMBAR.	10 M. 21 "	Indoor at County Hospital Motherwell, Hairmyres Colony, and Cottage Hospital, Blantyre.	...	1	4
	11 F. 7 "	Indoor at Royal Hospital for Sick Children, Glasgow.	...	1	2,163
	12 F. 15 "	—	...	1	952

TABLE V.

ISCHIIUM.

13 M. 14 "	1 year.	Indoor operative treatment at Royal Infirmary, Glasgow.	Good. Caries of ischial tuberosity with sinus.	1	14	—
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TABLE VI.

MALAR BONE.

14 F. 3 "	3 months.	—	Osteitis of malar bone with overlying cold abscess.	1	578	Other lesions—spina ventosa of phalanges of fingers.
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TABLE VII.

CALCANEUM.

15 F. 14 years.	2 years.	County Hospital, Stonehouse, for cervical adenitis. Eye Infirmary, Glasgow. Shotis Sanatorium.	Calcaneum broadened. Sinuses on outer and inner side. Sequestrum of body of bone.	1	979	Other lesion—tuberculous osteitis of frontal bone with sinus. Dismissed with normal range of movement of foot and ankle.
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TABLE VIII.

METATARSAL BONE.

16 F. 4 "	3 months.	Outdoor at Royal Hospital for Sick Children, Glasgow.	Spina ventosa	1	32	Left prematurely.
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Case	Sex	Age	Duration of Illness	Past Treatment	Condition on Admission	Result of Treatment					Remarks	
						Cured	Imp.	I.S.Q.	Worse	Died		Duration of Treatment in Days
TABLE IX.												
MULTIPLE LESIONS.												
17	F.	8 years.	3 years.	Outdoor at Royal Hospital for Sick Children, Glasgow.	Lesions of malar bone, inferior maxilla, dactylitis of both hands and left foot, all with sinuses.	1	...	...	...	...	765	—
TABLE X.												
HIP-JOINT.												
18	M.	9	7	Ambulant treatment at outdoor department of Glasgow Royal Infirmary. Thomas's splint.	Poor. Hip dislocated. Limb atrophied. Numerous sinuses.	1	...	...	...	...	1,401	Left with a short atrophied leg.
19	M.	16	9	Operative treatment at Western Infirmary, incision of abscess,	Poor. Dislocation of hip. Atrophy of leg. Sinuses.	1	...	...	...	...	1,638	Disease complicated with tuberculous cervical adenitis. General condition on dismissal good, but leg considerably shortened and atrophied.
20	M.	18	1½	Indoor at County Hospital, Stonehouse.	No deformity.	1	...	...	...	...	764	Transferred to Hainmyres for occupational training.
21	M.	19	1	Ambulant treatment as outdoor patient at Royal Infirmary, Glasgow, provision of Thomas's hip-splint.	Mild morbus coxae. No deformity.	1	...	...	...	...	130	Had been wearing a Thomas's hip-splint for 8 months before admission.
22	F.	5	8 months.	—	Acute morbus coxae without deformity.	1	...	...	...	...	1,191	Developed an external crural abscess which healed under aspiration. Dismissed with limb

23	F.	7	"	6	"	—	Early morbus coxæ.	1	...	...	...	2,245	Developed other lesions under treatment, including arthritis of opposite hip-joint. Ultimate result good.
24	F.	8	"	3	"	—	Early uncomplicated morbus coxæ.	1	...	...	...	513	No deformity.
25	F.	13	"	6½	years	Indoor at Royal Infirmary, Glasgow. County Hospital, Stonehouse, for 3½ years, during 2½ of which hip-joint was immobilized.	Poor. Dislocation of hip. Sinuses. Malar tuberculosis.	...	...	...	1	834	Dismissed septicæmic. Has since died.
26	F.	21	years.	6	months.	—	Good. Early uncomplicated morbus coxæ.	1	...	...	...	392	Dismissed with no clinical deformity.
27	F.	25	"	—	—	—	Healed disease. Considerable shortening of leg.	...	...	1	...	5	Admitted for opinion re treatment, amputation, or provision of special boot. Latter decided upon.

TABLE XI.

KNEE-JOINT.

28	M.	8	"	4	years.	—	Synovitis. No luxation. Rarefaction of epiphyses of joint.	1	...	...	...	295	Patient dismissed wearing callipersplint. Joint perfectly mobile.
29	M.	10	"	5	months.	Ambulant treatment (plaster splint to one joint) at Royal Infirmary, Glasgow.	Hydrops both joints. X-ray showed epiphysitis of femur on one side, of tibia on other.	1	...	...	...	1,435	Formation of sinuses on each side under treatment. Dismissed with free movement in each joint, but both slightly valgus.

Case	Sex	Age	Duration of Illness.	Past Treatment	Condition on Admission.	Cured	Imp.	I.S.Q.	Worse	Died	Duration of Treatment in Days	Remarks
30	M.	13 years.	9 months.	Indoor at Royal Infirmary, Glasgow, incision of joint.	Joint dislocated. Sinuses round the joint.	1	...	...	...	...	1,562	Other lesions on admission, dactylitis of thumb, and tuberculous osteomyelitis of tibia. Under treatment developed dorsal caries with paraplegia. Dismissed with dislocated ankylosed joint. To return for excision of joint or supra-condylar osteotomy.
31	M	36	6 years.	County Hospital, Stonehouse.	Joint disorganised and dislocated. Sinuses.	1	...	...	...	...	109	Leg amputated through middle of thigh.
32	F.	1	3 months.	Longriggend Sanatorium.	Epiphysitis of femur with extra-articular cold abscess.	1	...	...	...	...	491	Other lesions on admission dactylitis and multiple subcutaneous tuberculous.
33	F.	4	6	—	Tumor albus and X-ray signs of early arthritis.	...	...	1	...	...	...	Removed against advice, re-admitted, and now under treatment.
34	F.	7	3	—	Early arthritis. Epiphyseal rarefaction, diminution of intra-articular space, synovitis.	1	...	...	...	...	617	Joint perfectly mobile.
35	F.	12	3	—	Tumor albus. Area of caries in femoral epiphysis. No deformity.	1	...	...	...	...	1,485	Recovery of normal range of movement.
36	F.	47	1½ years.	Longriggend Sanatorium.	Joint dislocated and disorganised.	1	...	...	...	...	69	Leg amputated through middle of thigh. Patient has pulmonary tuberculosis.

38	M.	54	"	2	"	Indoor at Royal Infirmary, Edinburgh.	Ankle-joint disorganised. Abscess and sinus formation.	...	...	...	1	474	Other lesions, tuberculous epididymitis and inguinal adenitis with sinus. Amputation (16/3/26) through lower 3rd of leg. Stump healed, but death occurred (14/5/27) from cerebral hæmorrhage.
39	F.	6	"	5 months.	"	Plaster splinting at home.	Swelling of joint. Abscess on internal aspect. Joint rarefied.	1	...	...	...	1,333	Sinus formed on inside of joint. Dismissed with perfectly mobile joint.
40	F.	16	"	1½ years.	"	Outdoor at Royal Infirmary, Glasgow.	Swelling and rarefaction of joint.	1	...	...	...	360	Normal joint on dismissal.

TABLE XIII.

ELBOW-JOINT.													
41	M.	6	"	10 months.	Outdoor at Royal Hospital for Sick Children, Glasgow. Plaster splint.	Poor. Spindle-shaped swelling of elbow with two sinuses. Rarefaction of joint. Spina ventosa of ulna.	...	...	...	...	1	1,480	Developed tuberculosis of lumbar spine and sacrum.
42	M.	15	"	3	"	Outdoor at Royal Infirmary, Glasgow.	Swelling of joint with limitation of movement. Axillary adenitis.	1	...	...	...	68	Diagnosis doubtful.
43	F.	2	"	5	"	-----	Swelling of joint, and spina ventosa of ulna.	1	...	...	...	310	Complication — phlyctenular cornetis.
44	F.	4	"	2 years.	"	Outdoor at Royal Infirmary, Glasgow.	Swelling and limitation of movement of joint. Spina ventosa of ulna.	1	...	...	...	228	Old spina ventosa of a metatarsal bone. Otitis media. Dismissed well. Slight limitation in hyperextension.

Case	Sex	Age	Duration of illness	Past Treatment	Condition on Admission	Result of Treatment					Remarks	
						Cured.	Imp.	L.S.Q.	Worse	Died		
TABLE XIV.												
WRIST-JOINT.												
45	M.	16 years.	15 months.	Indoor at Royal Infirmary, Glasgow.	Swelling of wrist. Osteoporosis of carpus. Abscess on palmar aspect.	1	523	—
TABLE XV.												
CERVICAL GLANDS.												
46-66	M.	1 $\frac{3}{4}$ to 56	2 to 4 years.	—	—	16	5	Maximum 646 Minimum 4 Average 95	—
TABLE XVI.												
PERITONEUM.												
67	M.	9	9 months.	Dalserf Hospital.	Plastic peritonitis.	1	...	87	Complicated with tuberculous osteitis of sternum and ribs. Died since dismissal.
TABLE XVII.												
SKIN.												
68	M.	6	4 years.	County Hospital, Motherwell, Longriggend Sanatorium, Hairmyres Colony.	Multiple areas of scrophuloderma both legs and inguinal regions. Pes equinus of left leg.	1	534	Dismissed well. Lengthening of left tendo Achillis. Dismissed with no impediment in gait.

TREATMENT.—As hitherto treatment was conducted on conservative lines, by exposure to natural or artificial sunlight or both in all cases; in osteo-articular tuberculosis by immobilization attained by extension, plaster-of-Paris or celluloid splints or by such as those of Jones and Thomas; and by aspiration rather than incision of cold abscesses. Operative treatment seemed necessary in six cases. Its nature and result will be noted in Table 18.

TABLE XVIII.

Case	Sex	Age	Disease	Treatment	Result
1	M.	6	Pes équinus.	Lengthening of tendo Achillis.	Well.
2	M.	30	Tuberculous arthritis of ankle-joint.	Syme's amputation.	Well.
3	M.	36	Tuberculous arthritis of knee-joint.	Amputation through thigh.	Well.
4	M.	54	Tuberculous arthritis of ankle-joint.	Amputation of foot.	Death from cerebral hæmorrhage.
5	F.	5	Genu-valgum, complication of morbus coxæ.	Supra-condylar linear osteotomy.	Well.
6	F.	8	Tuberculous cervical adenitis.	Incision.	Well.

All patients were examined by the dentist, who discovered 42 in need of treatment. This was given, and consisted in stopping 26 carious teeth and extracting 95. General anæsthesia was used in 5, and local anæsthesia in the rest of the cases requiring extraction.

X-RAY APPARATUS —Unless contra-indicated by an advanced stage of disease rendering transfer of the patient to the X-ray Department inadvisable, or by the wearing of a more or less impenetrable splint, X-ray examination was made, at intervals of two months, of all patients suffering from tuberculosis of the osseous or articular system. Since this apparatus was installed in the hospital four years ago, convincing evidence has accumulated of the indispensability of radiographic examination, not only in the diagnosis, but also during the course of treatment of such disease. But while it proved to be of great value, the plant, much of which was second-hand when purchased, could not fail to be recognised latterly as out-of-date, too slow in its action, and lacking in penetrative power. For children

who are naturally restless its speed was so slow as occasionally to lead to blurred radiograms, and in adults its defective power of penetration often precluded satisfactory lateral photography of the spine. Moreover, there were reasons to doubt the efficiency of the protective screening of the staff from stray radiation by X-rays, now known to be very deleterious to the health of those daily exposed to it. Accordingly a report on the X-ray Department and its equipment was requested from the National Physical Laboratories, and was provided on 25th April, 1927, by their expert adviser, Dr. Kaye, who, though he commented favourably on the X-ray Department itself in most respects, lighting, ventilation, colour scheme, and cubic space, adversely criticised the equipment on various heads, including its slowness of action and insufficient protection. Thereafter the Scottish Board of Health, having been acquainted with the contents of the report, approved in August, 1927, proposals for certain minor improvements in the X-ray Department, and provisionally of getting plant of modern design. As, however, the electric generating plant at the hospital is of small capacity, and there is a prospect of the district being supplied by the Clyde Valley Electrical Supply Company at a comparatively early date, it was decided meantime merely to secure protection for the staff as recommended by Dr. Kaye, and to postpone the purchase of new plant till a satisfactory electric supply should be obtained.

EDUCATION OF PATIENTS.—On the school register there were 56 children, aged from 3 to 14 years. Greatly to their advantage they received a course of elementary education suited to their physical condition, age, and sex. The younger ones were amused by paper-folding, clay modelling, and story telling; the older instructed in reading, writing, and arithmetic, with such diversions as drawing, raffia work, basketry, knitting, and sewing. Even adults of both sexes are found to take a pleasure in mechanical employment, *e.g.*, basketry, &c., and many of the bigger boys do not disdain to learn to knit and sew, from which possibly they may ultimately profit. This kindly attitude towards such occupations may be explained by the fact that nearly all the patients at the hospital are bed-ridden for a long time. At present there is under treatment a girl of 13 years who, when admitted a few months ago, could neither read or write, prolonged illness having prevented her attending school regularly. Now she can read simple stories. For a similar reason a surprising number of children from 8 to 12 years of age have come

to hospital in the past illiterate and incredibly ignorant in general knowledge. All were bright children, and rapidly progressed under the tuition of Miss Agnes Easton, who continues to give valuable service as teacher at the hospital.

OUTDOOR DEPARTMENT.

506 patients were treated at the Outdoor Department. No patient was treated unless recommended by members of the County Medical Staff at the various Tuberculosis Dispensaries and Infant Welfare Centres, or by medical practitioners in the Middle Ward of Lanark, in which also all the patients resided. For convenience they are classified as cases sent for consultation, operation, and X-ray examination.

TABLE XIX.
CONSULTATION CASES.

System	Diagnosis	No. of Cases
OSSEOUS SYSTEM.	Tuberculosis of Spine, - - - - -	4
	Scoliosis, - - - - -	1
	Genu-varum, - - - - -	2
	Examination of Amputation Stump for Artificial Leg, - - - - -	1
ARTICULAR SYSTEM.	Morbus Coxæ, - - - - -	3
	Rheumatoid Arthritis, - - - - -	1
	Dislocation of Semi-lunar Cartilage, - - - - -	1
	Sprain of Ankle-joint, - - - - -	1
MUSCULAR SYSTEM.	Torticollis, - - - - -	1
NERVOUS SYSTEM.	Infantile Paralysis, - - - - -	2
	Little's Disease, - - - - -	2
	Mental Deficiency, - - - - -	1
PULMONARY SYSTEM.	Pulmonary Tuberculosis, - - - - -	2
	Bronchitis, - - - - -	3
GLANDULAR SYSTEM.	Cervical Adenitis (tuberculous), - - - - -	6
	" " (septic), - - - - -	4
	Tabes Mesenterica, - - - - -	4
	Hilous Tuberculosis, - - - - -	1
MISCELLANEOUS.	Lupus of Ear, - - - - -	1
	Dental Caries, - - - - -	6
	Tonsillitis (chronic), - - - - -	16
	Chronic Tonsillitis and Adenoids, - - - - -	19
	Adenoids, - - - - -	4
	Prepatellar Bursitis, - - - - -	2
	Inguinal Hernia, - - - - -	3
	Calculus of Wharton's Duct, - - - - -	1
	Goitre, - - - - -	1
	Ganglion of Wrist, - - - - -	1
	Phimosis, - - - - -	1
	Gastric Cancer, - - - - -	1
	Total, - - - - -	96

TABLE XX.

OPERATION CASES.

System	Disease	No of Cases	Operation	Result	Remarks
OSSEOUS SYSTEM.	Lumbar Caries with Lumbar Abscess.	1	Aspiration.	Imp.	Admitted to hospital.
	Spina Bifida with Retro-medullary Embryoma.	1	Excision of Embryoma.	Died.	—
	Spina Ventosa of Meta-carpal with Cold Abscess.	1	Aspiration.	Imp.	Under treatment.
	Necrosis of Phalanx of Finger.	1	Amputation of Finger.	Well.	—
	Exostosis of Meta-Tarsal.	1	Excision of Exostosis.	Well.	—
	Osteomyelitis of Phalanx of Finger.	1	Incision.	Well.	—
ARTICULAR SYSTEM.	Synovitis of Knee-joint.	2	Aspiration.	Well.	—
	Dislocation of Elbow-joint.	1	Reduction.	Well.	—
GLANDULAR SYSTEM.	Tuberculous Cervical Adenitis.	6	Incision.	Well.	—
	Tuberculous Cervical Adenitis.	1	Aspiration.	Well.	—
	Septic Cervical Adenitis.	2	Incision.	Well.	—
	Tuberculous Axillary Adenitis.	1	Aspiration.	Well.	—
MISCELLANEOUS.	Chronic Tonsillitis and Adenoids.	198	Enucleation and Curetting.	Well.	—
	Dental Caries.	17	Extraction.	Well.	—
	Phimosis.	20	Circumcision.	Well.	—
	Preputial Sebaceous Cyst.	1	Excision.	Well.	—
	Hydrocele of Tunica Vaginalis.	1	Winkelmann's Operation.	Well.	—
	Inguinal Hernia.	4	Radical Cure.	Well.	—
	Ganglion of Wrist.	1	Excision.	Well.	—
	Nasal Polypus.	1	Removal.	Well.	—
	Acute Abscess of Thigh.	1	Incision.	Well.	—
	Total,	263			

TABLE XXI.

X-RAY CASES.

Region	Result of Examination	No of Cases
HEAD.	Cranium—normal, - - - -	-
	Superior Maxilla—normal, - - - -	1
	Inferior Maxilla—, - - - -	3
	„ „ —apical dental abscess, - - - -	1
BACK.	Spine—normal, - - - -	6
	„ —tuberculous, - - - -	6
	„ —rheumatoid arthritis, - - - -	1
	„ —fracture, - - - -	1
THORAX.	Lungs—normal, - - - -	4
	Pulmonary Tuberculosis, - - - -	2
	Chronic Brouchitis, - - - -	6
	Chronic Pulmonary Fibrosis, - - - -	12
	Chronic Pleurisy, - - - -	1
	Shrapnel in Lung, - - - -	1
	Hilous Tuberculosis, - - - -	1
	Ribs—normal, - - - -	3
PELVIS.	Pelvis—normal, - - - -	2
HIP.	Tuberculous Arthritis, - - - -	10
	Rheumatoid Arthritis, - - - -	2
	Osteochondritis of Superior, - - - -	2
	Epiphysis of Femur, - - - -	
THIGH.	Fracture of Femur, - - - -	1
	Pyogenic Osteomyelitis of Femur, - - - -	1
	Needle in Thigh, - - - -	1
KNEE.	Knee-joint—normal, - - - -	7
	Tuberculous Arthritis of Knee-joint, - - - -	2
	Rheumatoid „ „ „ „ - - - -	2
	Synovitis of Knee-joint, „ „ - - - -	4
	Exostosis of Femur, - - - -	1
	Genu Valgum, - - - -	1
LOWER LEG.	Sarcoma of Tibia, - - - -	1
	Fracture „ - - - -	1
	„ Fibula, - - - -	1
	Potts' Fracture, - - - -	1
ANKLE.	Ankle-joint—normal, - - - -	6
	Tuberculosis of Ankle-joint, - - - -	1
	Talipes (infantile paralysis), - - - -	4
FOOT.	Foot—normal, - - - -	2
	Traumatic periostitis of Metatarsal Bone, - - - -	1
	Osteomyelitis of „ „ - - - -	1
	Exostosis of Metatarsal Bone, - - - -	1
TOES.	Hallux Rigidus, - - - -	1
SHOULDER.	Shoulder-joint—normal, - - - -	3
ARM.	Fracture of both Radius and Humerus, - - - -	1
UPPER ARM.	Fracture of Humerus, - - - -	1
ELBOW.	Elbow-joint—normal, - - - -	4
	„ „ —dislocation, - - - -	1
FORE-ARM.	Fore-arm—normal, - - - -	4
	Fracture of Ulna, - - - -	3
	Fracture of Radius, - - - -	3
	Separation of Lower Epiphysis of Radius, - - - -	1
	Colles Fracture, - - - -	6
WRIST.	Wrist—normal, - - - -	2
HAND.	Hand—normal, - - - -	1
	Fracture of Metacarpal Bone, - - - -	3
FINGERS.	Fingers—normal, - - - -	2
	Spina Ventosa of Phalanges, - - - -	2
	Enchondroma of Phalanx, - - - -	1

A few photographs are appended illustrating the nature of the work done at the hospital :—

Plate 1 (Table IV, No. 4).—

Early dorsal spinal tuberculosis, showing recovery with trivial deformity.

Plate 2.—

Lateral view of the spine of previous case, showing healed lesion with partial fusion of two upper dorsal vertebrae.

Plate 3.—

Mid-dorsal caries. Boy was treated for a few weeks in this hospital then removed, against advice, to his home where he received inefficient treatment with resulting deformity. Now attending out-door department at which he was supplied with celluloid spinal jacket.

Plate 4 (Table IV, Case 3).—

Badly treated spinal tuberculosis of 23 years' duration. Extreme deformity.

Plate 5.—

Same case wearing celluloid spinal jacket.

Plate 6.—

Lateral view of the spinal column of preceding case, exemplifying spinal curvature of an acute degree. The anterior surface of the dorsal vertebra forming the apex of the angular curvature rests on a vertebra below which is reduced to a small wedge-shaped body. Cavitation is observable in two other dorsal vertebrae.

Plate 7.—

Case of rickets. Double genu valgum.

Plate 8.—

Same case after double supra-condylar linear osteotomy.



(Plate 1)



(Plate 2).



(Plate 3).



(Plate 4).



(Plate 5).



(Plate 6).



(Plate 7).



(Plate 8).

County Hospital, Dalserf.

Visiting Medical Officer—Dr. J. R. SUTHERLAND.

Matron—Miss H. J. MORE.

BUILDINGS—This hospital has two wards containing in all 16 beds and cots. It is worked in association with the hospital at Stonehouse, and admits patients of a similar type.

STAFF.—The staff consists of a matron, two probationer nurses, a cook, a maid, and a gardener.

PATIENTS.—20 patients were admitted, and 20 dismissed during the year.

As shown in the following tables, they came from the Middle Ward of Lanark, and were mostly children:—

PLACE OF RESIDENCE.

Parish.	Number of Patients.	Parish.	Number of Patients.
Blantyre, - - -	4	Dalserf. - - -	4
Bothwell, - - -	5	Hamilton, - - -	2
Cambuslang, - - -	1	New Monkland, - - -	1
Cambusnethan, - - -	2	Shotts, - - -	1
Total,			20

AGE AND SEX DISTRIBUTION.

Years.	Males.	Females.	Total.
- 5	3	4	7
- 10	4	4	8
- 15	2	1	3
- 20	—	1	1
- 25	—	—	—
- 30	—	1	1
Total,	9	11	20

DIAGNOSIS.—All but four were affected with tuberculosis. These were a girl, aged 1 year and 9 months, suffering from congenital dislocation of the hip-joint; a girl, 6 years of age, from arthritis of the hip-joint of uncertain origin; a boy, 4 years and 11 months, from an acute abscess of the thigh; and a woman, aged 25 years, from persistent flexion of the knee-joint and contracture of the hamstring muscles due to chronic arthritis of doubtful nature. The first and last were transferred to the hospital at Stonehouse for further treatment, while the second and third were sent home well in 116 and 148 days. The main features of the disease of the 16 patients affected with tuberculosis are displayed in the following table:—

Case	Sex	Age	Duration of Illness	Past Treatment	Condition on Admission	Results of Treatment					Remarks	
						Cured	Imp.	L.S.Q.	Worse	Died		
SPINE.	1 M.	4 years.	8 months.	Operative treatment at Royal Infirmary, Glasgow, and County Hospital, Motherwell.	Poor. Dorsal-lumbar angular curvature with septic psoas sinus.	...	...	...	1	...	244	Complication. Tuberculous cervical adenitis.
	2 F.	3 "	15 "	—	Good. Convalescing from dorsal caries without deformity.	1	...	...	...	...	216	—
	3 F.	14 "	9 years.	—	Poor. Marked upper dorsal curvature of large radius.	1	...	...	...	...	559	—
RADIUS.	4 F.	6 "	4 months.	—	Lower dorsal angular curvature.	...	...	...	1	...	46	Dismissed with tuberculous meningitis. Died 5 days later.
	5 F.	3½ "	2 years.	—	Spina ventosa of radius with sinus.	...	1	...	...	...	162	Sequel to measles. Transferred to County Hospital, Motherwell, with whooping cough.
	6 M.	12 "	8 months.	Indoor operative treatment at Victoria Infirmary, Glasgow.	Spina ventosa of both radial bones with sinuses.	1	...	...	...	...	858	Complication. Spina ventosa of metatarsal bone.
METACARPAL.	7 M.	4 "	2 "	—	Spina ventosa of metacarpal bone with cold abscess.	...	1	...	...	...	32	Complication. Spina ventosa of phalanx of finger. Transferred to County Hospital, Motherwell, with whooping cough.

8	M.	4	"	1 year.	Operative outdoor treatment at Glasgow Royal Infirmary.	Spina ventosa of metacarpal sinus.	1	...	...	284	Complication. Spina ventosa of phalanx of finger. Transferred to County Hospital, Motherwell, with whooping cough.
HIP-JOINT.	9	M.	4	"	1	—	Early morbus coxæ without deformity.	1	...	31	Transferred to County Hospital with whooping cough.
	10	F.	7	"	4	County Hospital, Dalserf and Stonehouse.	Residual crural abscess after morbus coxæ.	1	...	155	—
KNEE-JOINT.	11	F.	11	"	8 months.	—	Synovitis.	1	...	215	—
ANKLE-JOINT.	12	M.	9 $\frac{5}{16}$	"	2 years.	—	Swelling of ankle, tenosynovitis, atrophy of calf, &c.	1	...	1,048	—
	13	F.	3 $\frac{3}{16}$	"	1 $\frac{8}{16}$	—	Swelling of ankle, tenosynovitis, &c.	1	...	583	—
GLANDS OF NECK.	14	M.	5	"	7 months.	Stonehouse Hospital.	Enlargement of angulo-maxillary glands with sinus.	1	...	131	—
ABDOMEN.	15	M.	5 $\frac{9}{12}$	"	Indefinite.	At Hospital, Stonehouse, for 1 year for tuberculous peritonitis.	Poor. Physical signs indefinite. Past history definite.	1	...	177	—
	16	F.	2 $\frac{6}{12}$	"	Indefinite.	Blantyre Hospital, and Calderbank House.	Poor. Plastic peritonitis.	1	...	945	—

County Sanatorium, Uppertown, Longriggend.

Physician-Superintendent—J. M'CALLUM LANG, M.D., D.P.H.

Visiting Physician—RICHARD RAE, M.B., CH.B., D.P.H.

Matron—Miss STEWART.

ADMISSION AND DISCHARGES.

In Residence 1st January.	Admitted during year.	Discharged during year.	Died during year.	In Residence 31st December.
43	171	*152	19	43
		171		

* Seven patients were re-admitted, and completed two periods of residence during the year, making a net total of 145 discharged and 19 died, and the subsequent statistics deal with the total of 164.

PLACE OF RESIDENCE.—Of the total cases discharged, 161 resided in the Middle Ward District, the place of residence according to parish being as follows:—

Avondale, - - -	1	Dalserf, - - -	8
East Kilbride, - -	2	Dalziel, - - -	2
Stonehouse, - - -	1	Hamilton, - - -	4
Blantyre, - - -	17	New Monkland, - -	16
Bothwell, - - -	43	Old Monkland, - -	31
Cambuslang, - - -	23	Shotts, - - -	10
Cambusnethan, - -	3		
		Total, - - -	161

The remaining 3 cases were admitted from Burgh of
Airdrie, 2; Upper Ward, 1, - - - - - 3

164

AGE AND SEX.—In the following table the cases are shown classified according to age and sex, and according to age-groups for both sexes,

each age-group also containing the pulmonary, non-pulmonary, and non-tuberculous cases referable to it:—

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age-Groups.	Pulm.	Non- Pulm.	Tuber- culised.	Non- Tub.
- 5	19	8	27	Pre-School, - -	—	6	8	13
- 10	12	18	30	School Age, - -	{	2	8	14
- 15	8	15	23			3	10	7
- 20	2	13	15			6	4	2
- 25	4	12	16	Adolescent, - -	{	9	2	1
- 30	9	4	13			8	1	—
- 35	2	5	7			5	—	1
- 40	5	4	9	Early Maturity, -	{	7	—	—
- 45	8	3	11			4	—	—
- 50	4	2	6			3	—	—
- 55	4	1	5	Late Maturity, -	{	4	—	—
- 60	1	—	1			1	—	—
- 65	1	—	1			—	1	—
70	—	—	—			—	—	—
<hr/>								
	79	85	164			52	32	33
<hr/>								
						47		

DURATION OF RESIDENCE.

RESIDENCE IN DAYS.

	Maximum.	Minimum.	Average.
Pulmonary, - -	910	4	123
Non-Pulmonary, -	723	3	161
Tuberculised, - -	943	6	121
Not Tuberculous, -	452	1	88

RESIDENCE IN MONTHS.

	0-1	1-3	-6	-9	-12	-18	-24	Over.
Pulmonary, - -	13	17	12	4	3	1	—	2
Non-Pulmonary, -	5	12	6	2	3	2	1	1
Tuberculised, - -	3	15	11	2	1	—	—	1
Not Tuberculous, -	10	21	13	2	—	1	—	—

TRANSFERS TO OTHER INSTITUTIONS.—After observation or at the end of their period of sanatorium treatment, 20 cases were transferred to other institutions as follows:—

Hairmyres, - -	10	Motherwell, - -	10
(2 with Scarlet Fever; 1 with German Measles.)			

Pulmonary Tuberculosis.

(52 CASES.)

Included under this heading are 6 cases of tuberculosis of the pleura, and 2 of active disease of the intrathoracic glands—leaving 44 cases of parenchymatous disease.

TUBERCULOSIS OF THE PLEURA (6 cases).—F.27.—Empyema with discharging sinus of five years' duration. Admitted in a dying condition, with signs of amyloid disease.

F.24.—Old-standing tuberculous empyema with discharging sinus, disease of the ribs, and erosion of the vertebræ margins. This patient was taken home by the parents, as she was showing symptoms of melancholia.

F.7.—Admitted with subacute febrile disease, and was actively ill for three months. After 348 days' residence was discharged with no evidence of active disease, and no signs of invasion of the lung.

M.27.—Pleurisy with effusion; transferred to Hairmyres after nine months' treatment, with no signs of active tuberculosis.

M.21 and F.30.—These were cases of convalescent and old-standing tuberculosis of the pleura respectively. There was no active disease on admission and none on discharge.

SUPPURATIVE MEDIASTINAL ADENITIS (2 cases). — This is an uncommon condition, and it was exceptional to have 2 cases in the Institution at the same time. One of the patients made a good recovery, the other became progressively worse—both received the same treatment.

K.M., aged 16, had been under dispensary observation as a contact since 1923. For four years she kept well, and was working until April, 1927, when she complained of debility, cough, and spit, after an attack of influenza. She was admitted to Longriggend, and for five weeks ran a swinging temperature, and presented all the appearances of acute phthisis without physical signs in the chest. X-ray examination revealed the presence of a mediastinal glandular mass with abscess formation. The lungs were not affected. The temperature subsided gradually, the signs of toxæmia cleared up, and thereafter her general condition improved with such rapidity that after $3\frac{1}{2}$ months' treatment she left the Institution in apparent good health. She has worked continuously since then without a relapse.

E.M. (F.23) was admitted to the Sanatorium in May with a history of debility following confinement nine months previously; influenza in March, 1927; weakness, cough, and spit thereafter.

She was very anæmic and debilitated on admission and looked ill. There were no abnormal physical signs in the chest: the tip of the spleen was palpable, and in the left supraclavicular region there was a swelling composed of many very small discrete glands. At this date there were no glands elsewhere, and the blood picture presented no diagnostic features. The radiograph revealed a normal lung parenchyma with a little thickening of the upper mediastinum to which no special significance could be attached. Throughout her residence she ran a continuous typical swinging temperature, and a series of radiographs revealed the development of a mediastinal abscess. Her general condition deteriorated, and she was transferred to Motherwell after four months' treatment. She ultimately left the district, and died in December, 1927.

DURATION OF ILLNESS.—The duration of illness recorded at the time of admission, and stated in monthly periods, was as follows:—

Classification on Admission.	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
Group I,	1	—	3	—	1	2	7
Group II,	—	2	1	1	—	11	15
Group III,	4	4	4	1	1	8	22

DURATION OF ILLNESS OF FATAL CASES.—Fifteen cases of pulmonary tuberculosis died, and the duration of illness from the date of onset to that of death was thus recorded in monthly periods:—

1-3	3-6	6-9	9-12	12-18	18-24	Over 24
2	3	2	—	1	1	6

GENERAL RESULTS OF TREATMENT.—The general condition of the patients on discharge is shown in the following tabular statement:—

Classification on Admission.	Number.	Quiescent.	Imp.	Stat.	Worse.	Died.
Group I,	7	3	1	3	—	—
Group II,	15	4	6	3	—	2
Group III,	22	—	1	4	4	13

SPUTUM EXAMINATIONS.—Bacteriological examination showed that 75 per cent. of the verified cases had tubercle bacilli in the spit:—

Classification on Admission.	Positive.	Negative.	No Spit.
Group I,	3	4	—
Group II,	10	5	—
Group III,	20	1	1

PULMONARY TUBERCULOSIS IN CHILDREN UNDER 15 (5 cases).—A girl, aged 7, suffering from subacute pleurisy with effusion has been referred to above.

F., 8 years.—Acute phthisis (spit positive) and intestinal tuberculosis of three months' duration. Died 26 days after admission.

F., 12 years.—Abdominal and general symptoms of two months' duration. Déspine and Frohlich signs present; impaired percussion right apex, definite shadow right upper lobe, violent local and general reaction to tuberculin; normal temperature and pulse. Probably arrested pulmonary tuberculosis. Discharged very much improved.

M., 14 years.—A contact with debility, cough and spit of six months' duration. Spit positive; X-ray positive; no abnormal physical signs of diagnostic importance. Transferred to Hairmyres well.

F., 14 years.—A case of chronic pulmonary tuberculosis of 3½ years' duration—formerly spit positive; definite X-ray and clinical signs; transferred to Hairmyres very much improved.

SPUTUM NEGATIVE PULMONARY TUBERCULOSIS (11 cases).—One patient had no sputum—a case of acute pneumonic phthisis following a large hæmoptysis prior to admission.

The confirmatory signs in the remaining 10 cases may be thus summarised:—

Positive X-ray.				No X-ray available.			
With hæmoptysis and crepitations,	...	...	2	Definite dullness, and crepitations,	...	...	1
With hæmoptysis,	...	...	2	Record of previous positive spit,	...	...	1
With definite dullness,	...	...	2				
With + + + tuberculin reaction,	...	...	1				
Doubtful X-ray.							
With recurrent hæmoptysis,	...	...	...	1			

An X-ray examination was regarded as positive when definite parenchymatous change was present in the upper half of the chest, and dullness and crepitations also refer to changes in the same location.

Non-Pulmonary Tuberculosis.

(32 CASES.)

Cases of non-pulmonary tuberculosis requiring only hygienic and nursing treatment were dealt with in the Institution, and those for whom operative interference or special appliances were necessary were transferred to the County Hospital at Motherwell or Stonehouse.

ABDOMINAL TUBERCULOSIS (16 cases).—In 7 instances *fever* of varying degree and duration was present, and the other signs might be thus summarised:—Glandular mass, 3; distension with free fluid, 1; distension, intractable diarrhoea, blood in stools, 1; discrete glands, 1; distension, discrete glands, maramus, 1. The first 4 cases mentioned, girls, aged 16, 7, 10, and 10 years, were resident in hospital for 394, 330, 291, and 262 days, and were dismissed apparently well—very satisfactory results in view of the active nature of the disease on admission.

The fifth case, a boy, aged 8 years, suffered from tuberculous ulceration of the bowel, and died 44 days after admission. There were no pulmonary symptoms or signs, but because of the type of disease the chest was X-rayed, and a primary lesion, calcified and inactive, was found in the parenchyma of the lung.

The sixth case, a girl, aged 8 years, was taken home by the parents in a dying condition, after 26 days' residence. On admission there was nothing to distinguish this child from many others for whom the outlook is uniformly good. She was rather thin, but of good colour; the temperature was normal; the abdomen slightly swollen, and a few discrete glands palpable. A fortnight later the evening temperature rose to 101°, and she complained of sore throat. There was a little exudate on the tonsils, negative for *B. diphtheria*, and the case appeared to be one of catarrhal sore throat. The temperature persisted, however, in an irregular fashion, and within a week she had symptoms of meningitis, confirmed by biochemical examination of the cerebro-spinal fluid.

The seventh case, an infant of 1 year, presented features of interest. The father was known to have definite pulmonary tuberculosis, and the baby had a history of having been "delicate since birth," and for four months prior to admission had loose stools and a spasmodic cough "like whooping-cough." The infant was marasmic

in appearance; the abdomen distended; a few discrete mesenteric glands were palpable. Signs of rickets were present, and the Von Pirquet reaction was strongly positive. For fourteen days there was little to note beyond the fact that the child made no progress. An irregular temperature developed with signs of consolidation at the right base, and evidence suggestive of bronchial adenitis. From this illness the infant made a slow recovery, and had improved a little when, seven weeks later, he contracted a typical attack of mild rubella. He was transferred to Motherwell, and died there five weeks later, without exhibiting any symptoms more definite than progressive asthenia. *Post-mortem*.—Numerous small mesenteric glands, not caseating, no peritonitis. Several mediastinal glands, some caseous, tuberculous infiltration of right lower lobe; left lung normal. The points of interest are (1) the prognostic significance of a positive Von Pirquet in a marasmic infant under 1 year, (2) the relative absence of physical signs, (3) the effect of a mild intercurrent infection.

Of the 9 *afebrile* cases, 3 had discrete glands; 1 tumidity and resistance; 1 peritoneal adhesions; 1 faecal fistula; 1 a post-operative diagnosis. In 2 cases the provisional diagnosis of abdominal tuberculosis was neither confirmed nor refuted, as the period of observation was too short.

With the exception of the patient who had a faecal fistula, these were cases in which the disease was arrested on admission and on discharge, and for whom sanatorium treatment was justified on the grounds of preventing a threatened reactivation of the old tuberculous lesion. They are to be distinguished from those cases mentioned above where during residence active disease became quiescent.

BONES AND JOINTS (4 cases).—*With Abscesses or Sinuses on Admission*.—Hip joint, 1; Os calcis, 1. A boy, aged 10 years, was admitted in 1924 with advanced hip-joint disease, and died of amyloid disease after three years' residence. A boy, aged 16 years, with tuberculous disease of the Os calcis, was transferred to Motherwell for operative treatment, and thereafter went to Hairmyres with the sinus still open.

Without Abscesses or Sinuses on Admission.—Spine, 1; hip joint, 1. In both instances the disease was old-standing and arrested on admission. Treatment was recommended on account of general debility, and the patients were discharged in good general health, no active disease having developed.

GLANDULAR TUBERCULOSIS (7 cases).—In one instance the glands were of the *multiple lymphoid type*, and the patient was discharged with the local condition unchanged and the general health improved.

Five patients had *glandular swellings without abscess formation* or with old healed scars on admission. In no case was the local lesion visibly improved, and in two instances the patients were transferred to Motherwell, one for excision for cosmetic reasons, and one for incision of a glandular abscess, which formed during residence.

One patient had *enlarged glands with multiple sinuses* on admission, and was transferred to Motherwell after 42 days' residence, the local condition having become worse.

KERATITIS (4 cases).—The local lesion was greatly improved by treatment in all four instances, and the patients were dismissed with disease inactive.

TUBERCULOUS EPIDIDYMITIS (1 case).—The disease was of old standing, and was arrested on admission. He was transferred to Hairmyres much improved in general health.

TUBERCULIN REACTIONS. — In 18 instances the tuberculin tests were applied to these cases of established tuberculous disease, and in all the result was positive. The ages are classified in these age groups:—1-2 years, 1; 2-3 years, 1; 3-5 years, 4; 5-10 years, 5; 10-15 years, 6; over 15 years, 1.

Tuberculised Children.

(33 CASES.)

Where children are stated in this report to have been suffering from abdominal tuberculosis, pulmonary tuberculosis, &c., the diagnosis was definitely established and discernible by ordinary clinical methods. The classification, "tuberculised," has been reserved for those who gave a positive tuberculin reaction, but did not present localising signs of diagnostic significance. Those children were admitted with a history of poor general health, either alone or combined with respiratory or abdominal symptoms. Some of them were debilitated and had symptoms suggestive of tuberculosis; others gave one the impression that the positive tuberculin reaction was not indicative

of the cause of their illnesses. In many cases it was undoubtedly only a coincidence, but, in the meantime, all have been classified as tuberculised. Four adults have been included in this general group—three were notified as suffering from pulmonary tuberculosis, and one from abdominal tuberculosis. In none of these could the diagnosis be confirmed, but the patients had some symptoms which made it desirable that they should remain under the observation of the Tuberculosis Officers.

Three of the patients had histories of *general symptoms alone*, and of these 1 was a debilitated contact, 1 had acute rheumatic carditis, and 1 was apparently quite well.

There were 17 cases in which *cough* was the chief localising symptom. Two of these patients were apparently quite well and had no abnormal signs, nor symptoms; 4 were debilitated; 1 had bronchitis; 1 arrested hilus disease; 1 pyogenic empyema; 6 chronic interstitial pneumonia; 2 pulmonary fibrosis following pleurisy.

Nine patients had a record of *abdominal trouble*—recurrent pain, diarrhoea, or distension—and of these 3 had no apparent disease; 1 dental sepsis; 1 debility; and 4 had abdominal signs not sufficiently definite to justify a diagnosis of abdominal tuberculosis.

Three children had both *abdominal and pulmonary symptoms*—1 had blepharitis, 1 vague abdominal signs, and 1 was a contact.

A boy, aged 7, had a history of *synovitis* prior to admission—presumably of toxic origin—but there was no swelling of the joint during his period of treatment.

TUBERCULIN REACTIONS.—All of these patients gave positive tuberculin reactions, and belonged to the following age groups:—1-2 years, 2; 3-5 years, 6; 5-10 years, 14; 10-15 years, 7; over 15 years, 4.

Non-Tuberculous Diseases.

(47 CASES.)

In 47 cases—that is, 28·7 per cent. of these under review—the diagnosis of tuberculosis was altered, as follows:—

ADULTS, 25.—Pulmonary fibrosis, 10; bronchiectasis, 1; bronchitis, 4; simple pleurisy, 1; simple laryngitis, 2; aneurism, 1; cardiac disease, 1; dental sepsis, 1; debility, 1; influenza, capillary bronchitis,

anthracosis, 1. The last-named patient died three days after admission, and the diagnosis was confirmed *post-mortem*.

CHILDREN, 22. — Malnutrition and debility, 8; chronic basal fibrosis, 2; empyema, 1; tonsils and adenoids, 2; rickets, 3; rheumatic carditis, 1; dental sepsis, 1; constipation, 2; whitlow, 1; no apparent disease, 1. The altered diagnosis in the case of these children was supported by repeated negative reactions to tuberculin applied to each child by the percutaneous, cutaneous, and subcutaneous methods. The ages of the children were:—1-2 years, 5; 2-3 years, 3; 3-5 years, 5; 5-10 years, 6; 10-15 years, 3. In 11 instances search was made for signs of enlargement of the posterior cervical glands, and in 10 cases the glands were palpable.

SPECIAL EXAMINATIONS AND TREATMENT.

DENTAL TREATMENT. — The visiting dentist made 8 visits during the year, and treated 64 patients, the total number of extractions being 181.

EAR, NOSE, AND THROAT SPECIALIST.—Thirteen cases were referred to the consulting laryngologist, and the following conditions were diagnosed: — Tuberculosis of the larynx, 1; simple laryngitis, 2; tuberculosis of the pharynx, 1; chronic pharyngitis, 1; turbinal hypertrophy, 1; rhinitis, 1; tonsils and adenoids, 3; bronchiectasis, 1; no apparent disease, 2.

X-RAY EXAMINATION.—Ninety patients were X-rayed at the County Hospital, Motherwell, the radiographs being forwarded to the Sanatorium and read in conjunction with the clinical picture.

ARTIFICIAL LIGHT TREATMENT. — The installation consists of a K.B.B. atmospheric mercury vapour lamp of the ceiling-suspension pattern, fitted with an iris diaphragm and quartz applicators. The motor-generator set is capable of supplying three lamps, and a three-phase supply was introduced to the light room.

Treatment was begun in the month of June. Patients were exposed twice a week at a distance of 3 feet from the lamp, and this was reduced to 2 feet in the case of those who had a prolonged course. The initial exposure varied from $1\frac{1}{2}$ to 3 minutes, and the maximum reached was 10 minutes.

The general results of treatment are classified in the following table. It is difficult to distinguish between the improvement which resulted from sanatorium treatment plus ultra-violet irradiation, and that which might have been expected from experience to follow sanatorium treatment alone. In many of the cases referred to, however, the patients had been in the Institution for some time prior to the introduction of this special form of treatment, and there was available information referring to the pre-light period, which permitted a comparison to be made between the two forms of treatment. In the table which follows, those patients who showed what was deemed to be abnormal improvement, due to artificial light, are classified under the heading, "Very much improved." Those whose condition is referred to as "improved" did not progress more quickly after light than they did before:—

Disease.	Very much		I.S.Q.	Worse.
	Improved.	Improved.		
Pulmonary Tuberculosis, ...	—	—	2	—
Abdominal Tuberculosis, ...	2	2	1	1
Glandular Tuberculosis, ...	—	3	—	—
Arrested Spinal Tuberculosis, ...	—	1	—	—
Tuberculous Keratitis, ...	—	1	—	—
Tuberculised, ...	1	4	—	—
Pulmonary Fibrosis, ...	—	1	—	—
Septic Empyema, ...	—	1	—	—
Rickets, ...	—	1	—	—
Whitlow, ...	—	1	—	—
Dental Sepsis, ...	—	1	—	—
Debility and Malnutrition, ...	—	5	—	—
3		21	3	1

In the case of two children with abdominal tuberculosis, there appeared to be abnormally rapid resolution of the palpable tumours. On the other hand, light treatment was stopped in the case of an infant who became listless after exposure, and some weeks later a softened gland ruptured externally in the region of the umbilicus. Recurrent lassitude led to treatment being stopped in another instance, but the same symptoms appeared from time to time in the absence of irradiation.

The patient who suffered from debility and anæmia, due to dental sepsis, did not improve much before she had artificial light; she did not progress further after treatment was begun, but she improved

greatly after the extraction of 11 teeth. It is more important to make an accurate diagnosis than to apply a general therapeutic measure to the treatment of a condition which may have widely different causes.

Our limited experience does not warrant any conclusions of moment, but while striking results have been observed in this Institution after treatment with natural sunlight, nothing comparable has been noticed with artificial light.

ADMINISTRATION.

BUILDINGS AND GROUNDS.—Internal painting of the male ward and part of the female ward was carried out by the Works' Department, who also executed various minor repairs in a most satisfactory manner.

ACCOMMODATION.—This remains unchanged, and consists of 37 beds and 15 cots. Throughout the year, the accommodation was used as follows:—Adult males, 15; adult females, 13; female children or non-infectious adults, 9; infants up to 3 years, 15.

STAFF.—The *Medical Staff* of 2 is non-resident, and remained unchanged. The *Nursing Staff* comprises a matron, 2 general trained sisters, 4 staff nurses, and 4 probationers. *Domestic Staff*—1 cook, 2 laundry maids, and 7 maids. *Outdoor Staff*—1 engineer attendant (resident) and 2 assistant gardener-firemen (1 resident).

Hairmyres Colony.

REPORT BY THE PHYSICIAN-SUPERINTENDENT, JAMES JOHNSTONE, M.B., CH.B., D.P.H.

FOR THE YEAR 1927.

PATIENTS TREATED.

The number of patients under treatment during the course of the year is shown in the following tabular statement:—

In Residence 1st January.	Admitted During Year.	Discharged During Year.	In Residence 31st December.
240	254	298	196

PATIENTS CLASSIFIED ACCORDING TO PLACE OF RESIDENCE.

(a) *Middle Ward.*

Blantyre, - - - - 42	New Monkland, . - - - 4
Bothwell, . - - - 80	Old Monkland, . - - - 21
Cambuslang, . - - - 47	Shotts, . - - - 23
Cambusnethan, - - - - 6	Stonehouse, - - - - 1
Dalserf, . - - - 10	Strathaven, - - - - 3
Hamilton, . - - - 7	
	Total, - - - 244

(b) *Other Districts and Burghs in County.*

Lower Ward, . - - - 2	Hamilton, . - - - 11
Upper Ward, . - - - 2	Rutherglen, . - - - 2
	Total, . - - 17

(c) *Outwith the County.*

Ayrshire, . - - - 1	Dunbartonshire, . - - - 8
Berwickshire, . - - - 1	Renfrewshire, . - - - 13
City of Glasgow, . - - - 13	Selkirkshire, . - - - 1
	Total, . - - 37

NATURE OF DISEASE.

Of the 298 patients discharged during the year under consideration, 280 proved to be tuberculous, in 118 cases the disease assuming

the pulmonary form, while in 162 it was non-pulmonary. The diseases affecting 5 cases were as follows:—Asthma, 1; bronchitis, 2; cardiac disease, 2. In the other 13 cases, no tuberculous lesion was detected.

In the statistics which follow, only 280 patients—discharged during the year—who proved to be tuberculous, are referred to:—

SOCIAL CONDITIONS.

	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 and over.	Total.
Men, - -	23	55	15	9	2	104
Women, -	2	5	3	1	—	11
Boys, - -	24	49	7	1	1	82
Girls, - -	20	53	9	1	—	83
Totals, -	69	162	34	12	3	280

OCCUPATIONS.

Miners, - - -	39	Civil Engineer, - - -	1
Artisans, - - -	24	Clerkess, - - -	1
Labourers, - - -	10	Constable, - - -	1
Clerks, - - -	4	Farm Worker, - - -	1
Salesmen, - - -	3	Forester, - - -	1
Boot Repairers, - - -	2	Glassmoulder, - - -	1
Domestic Servants, - - -	2	Motor Driver, - - -	1
Engine Drivers, - - -	2	Postman, - - -	1
Gardeners, - - -	2	Railway Guard, - - -	1
Carpet Worker, - - -	1	Seamstress, - - -	1
Carter, - - -	1		

PULMONARY TUBERCULOSIS.

	ADMISSIONS.			DISCHARGES.			
	Direct.	By Transfer.	Total.	Direct.	By Transfer.	Death.	Total.
Men, - -	65	16	81	73	7	1	81
Women, -	4	—	4	4	—	—	4
Boys, - -	15	2	17	17	—	—	17
Girls, - -	14	2	16	13	3	—	16
Totals, -	98	20	118	107	10	1	118

REASONS FOR DISCHARGE.

	Stage I.	Stage. II.	Stage III.	Totals.
Period of Treatment Completed, - -	16	15	4	35
Against Medical Advice, - - -	19	14	9	42
Domestic and Financial, - - -	8	7	3	18
Misconduct, - - - - -	3	7	2	12
Contagious and Infectious Disease, -	2	—	—	2
Transferred to other Institutions, - -	1	2	5	8
Died,	—	—	1	1
Totals, - -	49	45	24	118

The feature of this table is the number of patients who were discharged "against medical advice." This is mainly due to the erroneous impression amongst patients that a short period of treatment is quite sufficient. If one was dealing with advanced cases, then a limited period might be quite enough from an educational point of view, but, when the cases are in the early stage of the disease, a much longer period of residence is absolutely essential if one wishes to obtain satisfactory results.

AGE AND SEX DISTRIBUTION.

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age Groups
Under 5, - -	—	—	—	Pre-School Age.
„ 10, - -	8	13	21	School Age.
„ 15, - -	10	3	13	
„ 20, - -	16	—	16	Adolescence.
„ 25, - -	18	4	22	
„ 30, - -	9	—	9	Early Maturity.
„ 35, - -	10	—	10	
„ 40, - -	11	—	11	
„ 45, - -	8	—	8	
„ 50, - -	4	—	4	Late Maturity.
„ 55, - -	4	—	4	
„ 70, - -	—	—	—	Post Maturity.
Totals, - -	98	20	118	

DURATION OF ILLNESS.

	Months.			Years.		
Duration, -	1-3	3-6	6-12	1-2	2-4	Over 4
Cases, -	3	3	11	22	19	60

51 per cent. of the cases gave a history of over four years' illness. This is a slight reduction on the previous year's figures, but it is still unsatisfactory as regards early treatment.

INITIAL MANIFESTATIONS OF ILLNESS.

Cough, - - - -	43	Influenza, - - - -	3
Pleurisy, - - - -	24	Spinal Caries, - - - -	2
Pneumonia, - - - -	19	Adenitis, - - - -	1
Lassitude, - - - -	9	Empyema, - - - -	1
Hæmoptysis, - - - -	8	Enteritis, - - - -	1
Debility, - - - -	5	Glandular Abscess, - - - -	1

RESULTS OF TREATMENT.

The classification adopted is that of Turban-Gerhardt.

Stage of Disease.	Number of Patients.	T.B. Present.	Quiescent.	Improved.	No Change.	Worse.	Died.
I, - - -	49	3	14	25	10	—	—
II, - - -	45	11	9	25	5	6	—
III, - - -	24	15	—	9	8	6	1
Totals, - - -	118	29	23	59	23	12	1

This is one of the most important tables in the report, and it shows that pulmonary tuberculosis is not a fatal disease, provided it is treated in the early stages. In Stage I, 28 per cent. of the cases were quiescent; in other words, showed no evidence of active disease on discharge from the Colony. Even with the more advanced cases (Stage III), 37 per cent. were discharged improved. Taking all the groups together, 19 per cent. of the cases were quiescent and 50 per cent. improved. This table indicates the great benefits that are derived from the institutional treatment of pulmonary tuberculosis, showing that it is still one of the best means of eradicating the disease.

COMPLICATIONS.—The undernoted table shows complications present in the different stages of the disease:—

	Stage I.	Stage II.	Stage III.	Totals.
Blepharitis Marginalis, - - -	1	1	—	2
Cardiac Valvular Disease, - - -	—	1	—	1
Corneal Opacity, - - - -	—	1	—	1
Epilepsy, - - - -	1	—	—	1
Laryngitis, - - - -	—	1	3	4
Otorrhœa, - - - -	1	1	—	2
Pyorrhœa Alveolaris, - - -	—	1	—	1
Pharyngitis, - - - -	—	—	1	1
Sebaceous Cysts, - - - -	—	—	1	1
Strabismus, - - - -	—	—	1	1
Ulceration of Palate, - - -	—	2	—	2
Totals, - - - -	3	8	6	17

This table is still retained, although rather obsolete. The word "complication" is not accurate, as all these conditions are merely symptoms of the general disease.

DURATION OF RESIDENCE.

		Under 4 weeks.	4 and under 13 weeks.	13 and under 26 weeks.	26 and under 52 weeks.	52 weeks and over.	Average duration of stay in days.
Stage I,	- -	6	2	10	19	12	285
Stage II,	- -	—	4	10	13	18	343
Stage III,	- -	4	3	4	7	6	260
Totals,	-	10	9	24	39	36	

DURATION OF RESIDENCE IN DAYS.

		Average.	Maximum.	Minimum.
Men,	- -	302	1,191	3
Women,	- -	306	629	81
Boys,	- -	236	477	9
Girls,	- -	372	909	2

FAMILY HISTORY.

		Number of Cases Discharged.	Positive History.		
			Stage I.	Stage II.	Stage III.
Men,	- - -	81	9	5	7
Women,	- - -	4	—	1	1
Boys,	- - -	17	3	2	1
Girls,	- - -	16	3	2	—
		118	15	10	9
					29

NON-PULMONARY TUBERCULOSIS.

162 patients received treatment for the non-pulmonary form of tuberculosis, an increase of 29 on the previous year.

AGE AND SEX DISTRIBUTION.

Quinquennial Periods.	Males.	Females.	Both Sexes.	Age Groups.
Under 5,	- - —	1	1	Pre-School Age.
„ 10,	- - 37	35	72	School Age.
„ 15,	- - 29	32	61	
„ 20,	- - 5	3	8	Adolescence.
„ 25,	- - 7	3	10	
„ 30,	- - 2	—	2	Early Maturity.
„ 35,	- - 4	—	4	
„ 40,	- - 2	—	2	
„ 45,	- - 1	—	1	
„ 50,	- - —	—	—	Late Maturity.
„ 55,	- - 1	—	1	
„ 70,	- - —	—	—	Post Maturity.
Totals,	- 88	74	162	

The majority of the cases, 82 per cent., were between the ages of 5 and 15.

The following table shows results of treatment according to the nature of the disease:—

	Quiescent.	Imp.	No Change.	Worse.	Total.
Peripheral Glands, - - -	38	42	7	—	87
Tracheo-bronchial Glands, - -	1	16	4	—	21
Abdomen, - - - - -	8	10	5	—	23
Skin, - - - - -	5	5	1	—	11
Bone, - - - - -	3	5	—	1	9
Spine, - - - - -	1	—	1	—	2
Other Organs, - - - -	4	1	3	1	9
Totals, - - -	60	79	21	2	162

The above classification, according to the part affected, is only made for statistical purposes. Tuberculosis is a general disease, and its ravages are not confined to one particular part of the body. The great majority of the children admitted are of the tuberculised type, the cervical glands showing the most marked involvement.

9 per cent. of the peripheral gland cases had discharging sinuses before or during treatment.

DURATION OF RESIDENCE.							Average duration of stay in days.
	Under 4 Weeks.	4 Weeks and under 13.	13 Weeks and under 26.	26 Weeks and under 52.	52 Weeks and over.		
Peripheral Glands, - - -	6	12	12	34	23		290
Tracheo-bronchial Glands, -	3	7	5	5	1		146
Abdomen, - - - - -	3	3	6	7	4		207
Skin, - - - - -	2	2	2	1	4		406
Bone, - - - - -	—	3	4	1	1		163
Spine, - - - - -	—	1	—	—	1		328
Other Organs, - - - -	1	2	—	1	5		270
TOTALS, - - -	15	30	29	49	39		

DURATION OF RESIDENCE IN DAYS.

	Average.	Maximum.	Minimum.
Men, - - - - -	330	1,519	3
Women, - - - - -	334	568	92
Boys, - - - - -	218	790	2
Girls, - - - - -	254	2,127	6

It will be noted from the above table that the average duration of residence for children was 7 to 8 months. To obtain permanent results, one aims at a year's institutional treatment, but this is sometimes rather difficult to attain. Tuberculosis requires prolonged treatment, and in children it is an early manifestation, very amenable to treatment. A prolonged period of treatment at this stage will almost probably lead to permanent cure, whereas a shorter period will only cause temporary improvement, with the probability of further treatment at a later date.

FAMILY HISTORY.

	Number of Cases Discharged.	Positive.	Percentage.
Men, - - - -	23	4	17
Women, - - - -	7	2	29
Boys, - - - -	65	11	18
Girls, - - - -	67	16	24
Totals, -	162	33	20

EX-SERVICEMEN.

Included in the patients discharged during the year under consideration were 20 ex-servicemen, a decrease of 32 on the previous year. This marked decrease in the number of ex-servicemen is to be expected, a large number of cases requiring no further treatment and no new cases being notified. Of that number, 19 were affected with the pulmonary type of the disease, 7 being in Stage I, 9 in Stage II, and 3 in Stage III. In the remaining case, no definite tuberculous lesion could be detected.

GRADUATED LABOUR.

Of the 117 adult males discharged during the period under review, 90 registered for training. 17 were physically unfit for systematic training, but were engaged in occupational therapy, and 10 were unable to work without prejudice to their condition.

NECESSITOUS CASES.

During the year 75 necessitous cases—a decrease of 37 on last year—were supplied with clothing and boots, as follows:—

	Cases.	Value.
Middle Ward District, - - - -	53	£173 13 4
Other Districts, - - - -	22	67 3 8

The necessitous circumstances of all cases were verified by the respective Medical Officers of Health.

WASSERMANN TEST.

A specimen of blood for the Wassermann test was taken from all adult patients on admission, with the undernoted results:—

Positive, 4; Strongly positive, 7—Total, 11.

This was equal to 9 per cent. of the adult admissions. One might consider this normal for a mixed population. The figure for the previous year was 13 per cent.

DENTAL TREATMENT.

During the year, 119 adults and 80 children received treatment, as follows:—Extractions, 504; fillings, 55; scalings, 31. Our Dental Surgeon reported a marked improvement in the dental condition of the patients. This was borne out by the reduction in the number of scalings required, the figure being less than half that of the previous year. The same remark applied to fillings. Extractions showed a slight increase. Six patients were supplied with artificial dentures, but only in one case at the expense of the Local Authority. Dental treatment continued to be an extremely valuable aid in the treatment of tuberculosis.

X-RAYS.

This year the apparatus was transferred to Pavilion II, where one of the duty-rooms was converted and an adjoining room used for developing. The room was covered with rubber flooring and special blinds erected, thus fulfilling all modern requirements. A new combined couch and stand was purchased, and this has proved a great boon. One is now able to take tele-stereoscopic films. All patients were examined by the fluorescent screen, and, in the majority of cases, a radiogram was taken. In a large number, stereoscopic photographs were used, and these were of considerable value as an aid in the diagnosis of early tuberculosis. When our present induction-coil apparatus is replaced by a valve outfit, then we will have an apparatus suitable for every requirement in the diagnosis and treatment of tuberculosis.

ACTINOTHERAPY.

This is now the fifth year that ultra-violet rays have been used for the treatment of the non-pulmonary form of tuberculosis.

HELIO THERAPY. — Although the summer of 1927 was not very suitable for heliotherapy, by taking advantage of every sunny day it was possible to give treatment on 101 days. Exposures commenced on 8th May and terminated on 12th October. The great majority of the children reacted well, and a large number reached the stage of bronzing or pigmentation. The technique was similar to what has been described in previous reports. The results were excellent. There was a marked improvement in the physical condition of the children, shown by an increased liveliness, an improvement in appetite, and a steady increase in weight. This is still the most economical and efficient means of applying the ultra-violet rays. A large number of patients can be treated at the minimum of cost, but, unfortunately, in this climate it can only be applied during the summer months. The results seem to be permanent, as the health of the children remained good during the subsequent winter months.

ARTIFICIAL LIGHT.—The quartz mercury vapour, and carbon arc lamps were fully employed during the year. So great was the demand for treatment that, unfortunately, some cases had to be excluded. To obviate this, the question of increasing the size of the installation will have to be considered, with a view to treating all types of cases. After last year's experiments with the various types of carbons, we are now using a combination of polar white flame positive carbon and plain negative carbon, and the results have fully justified this combination.

In addition to the ordinary tuberculous cases, 7 cases of ring-worm were treated with the mercury vapour lamp, 5 cases with infection on the scalp and 2 on the back. All the cases received four exposures, at a distance of 12 inches, for five minutes, twice a week. A cure was effected in every case. It will be seen from the table that several other non-tuberculous conditions received treatment, and these are recorded as a matter of interest, and to show the great possibilities of Light Treatment.

Regarding the relative merits of the carbon arc and the mercury vapour lamps, after a further twelve months' experience one does not see any reason to alter the previous opinion that both types of lamps should be installed in treatment clinics, the carbon arc lamp being more adapted for general light baths and the mercury vapour for local treatment.

The following table shows the details of cases treated and discharged during the year. At the end of the year, 17 males and 10 females were still undergoing treatment—7 males and 2 females

with the mercury vapour lamp, and 10 males and 8 females with the carbon arc lamps:—

Lesion.	Patient. Name.	Age.	Sex.	Duration of Illness.	Duration of Treatment.	*Lamp.	Result.
Glands.	H. M.	8	F.	5 months.	4 months.	C.A.	Cured.
	A. M.	19	F.	10 years.	10 "	C.A.	Improved.
	C. C.	14	F.	6½ "	5½ "	C.A.	I.S.Q.
	J. T.	6	M.	3 "	6 "	M.V.	Cured.
Glands (Discharging Sinus).	J. M.	11	M.	2 months.	2 months.	C.A.	Cured.
	C. M'G.	22	M.	3 "	1 week.	M.V.	I.S.Q.
	W. M'A.	5	M.	1½ "	1½ months.	C.A.	Improved.
	W. J.	10	M.	1 year.	4 "	C.A.	Cured.
	M. H.	10	F.	5 years.	1½ "	C.A.	Cured.
	J. O'N.	6	M.	1 year.	6½ "	C.A.	Cured.
Fibroid Lupus.	S. M.	23	F.	19 years.	11 months.	C.A.	Cured.
	E. G.	30	M.	14 "	2¾ "	C.A. & M.V.	Improved.
	J. W.	23	F.	16 "	1½ years	C.A.	Cured.
	M. H.	17	M.	11 "	1 year	C.A.	Cured.
Catarrhal Lupus.	R. C.	22	M.	6 years.	1½ months.	M.V.	Improved.
	J. M.	20	M.	9 "	7½ "	M.V.	Cured.
Erythematosis.	J. L.	16	M.	8½ years.	4½ months.	C.A.	Improved.
Scrofuloderma.	M. C.	13	F.	2 years.	1½ months.	C.A.	Improved.
	J. W.	7	M.	3 "	2 "	C.A. & M.V.	Improved.
	S. R.	15	F.	7 months.	10 "	C.A.	Improved.
Bone.	J. S.	21	M.	3 years.	1 month.	C.A.	Improved.
	W. L.	6	M.	5 "	2 months.	C.A.	Cured.
	W. G.	14	M.	1½ "	1½ "	C.A.	I.S.Q.
	P. B.	18	M.	3 "	7 "	C.A.	Improved.
Abdomen.	A. M'C.	19	M.	17 months.	3 months.	C.A.	I.S.Q.
	J. I.	20	M.	6 "	5½ "	C.A.	Cured.
	M. R.	9	F.	3 "	7¼ "	C.A.	Cured.
	A. T.	8	M.	2 years.	11½ "	C.A.	Cured.
	W. M'M.	35	M.	2 "	½ month.	C.A.	I.S.Q.
Ischium.	T. B.	36	M.	16 years.	3 months.	M.V.	I.S.Q.
Laryngitis.	J. S.	31	M.	10 years.	½ month.	M.V.	I.S.Q.
Ulcer, Hard Palate.	J. M'G.	19	M.	10 years.	3 months.	M.V. & C.A.	Improved.
Ulcer, Soft Palate.	J. B.	22	M.	18 months.	5 "	C.A.	Cured.
Hypertrophied Tonsils.	J. W.	11	F.	1 month.	¾ month.	C.A.	I.S.Q.
Dermatitis.	J. M'E.	31	M.	6 years.	10 months.	M.V.	Cured.
	W. B.	31	M.	3 months.	1¼ "	M.V.	I.S.Q.
Ichthyosis.	L. M'G.	12	F.	3 years.	9¼ "	M.V.	Improved.
Warts.	T. R.	11	F.	1 year.	2½ "	M.V.	Cured.
Gas Burn.	D. M'C.	46	M.	8 years.	6 "	M.V.	Cured.
Septic Finger.	J. R.	13	M.	1 month.	2½ "	M.V.	Cured.
Septic Sore.	J. M.	10	M.	2 weeks.	1 month.	M.V.	Cured.
Shingles.	J. M'N.	31	M.	3 weeks.	3 weeks.	M.V.	Cured.
Furunculosis.	G. R.	17	M.	2 days.	10 days.	M.V.	Cured.

* M.V.—Mercury Vapour. C.A.—Carbon Arc.

OUT-PATIENTS.—The following table shows details of out-patients treated during the year. At the end of the year, 2 males and 3 females were undergoing treatment with the mercury vapour lamp:—

Lesion.	Name.	Patient. Age.	Sex.	Duration of Illness.	Duration of Treatment. *Lamp.	Result.
Glands.	Mrs. R.	33	F.	2 years.	5½ months.	C.A. & M.V. I.S.Q.
	D.A.	8	M.	1 year.	4 months.	M.V. Cured.
Glands (Discharging Sinus).	W. M'K.	5	M.	1 year.	2½ months.	M.V. Cured.
Fibroid Lupus.	S.B.	19	F.	2 years.	5¾ months.	M.V. Improved.
	Mrs. C.	42	F.	39 years.	9 months.	C.A. & M.V. Improved.
Catarrhal Lupus.	Mrs. M'I.	40	F.	6 years.	4 months.	M.V. Improved.
Abdomen.	J.D.	5	M.	3 years.	3 months.	M.V. Improved.
Erythematosis.	S.G.	38	F.	20 years.	6 months.	M.V. I.S.Q.
Scrofuloderma.	S.K.	13	F.	2 years.	1 year.	M.V. Improved.
Bone.	M.E.	62	F.	Many years.	4½ months.	C.A. & M.V. Cured.
Joints.	M.W.	26	F.	12 years.	2 months.	M.V. Improved.
	W.M.	26	M.	17 years.	1½ months.	M.V. Improved.

* M.V.—Mercury Vapour. C.A.—Carbon Arc.

These tables show that the best results were obtained in cases of glands with discharging sinuses, lupus, and lesions of the abdomen. An interesting feature is the comparatively short duration of treatment required in gland cases with discharging sinuses.

ARTIFICIAL PNEUMOTHORAX.

The operation of artificial pneumothorax, or the collapse of a diseased lung by means of air injected into the pleural cavity, has received considerable attention in institutions for the treatment of pulmonary tuberculosis. Although the great majority of cases at Hairmyres do not require this treatment, it was thought that it might benefit a few selected cases. In addition, there has been a request for refills by patients who have been treated elsewhere. Towards the end of the year a start was made, and a Holmes-Wingfield Pneumothorax Apparatus was purchased, and, so far, it has given every satisfaction. As only a few cases have been treated, it is rather difficult to express any opinion on the subject. By the end of the year, 3 primary injections and 26 refills had been given. All the cases were in Stage III and showed evidence of pleural adhesions, and for this reason the pneumothorax was only partial. In a subsequent report it will probably be possible to give more details.

BLOOD SEDIMENTATION REACTION.

The following is a report by Dr. Smith, Assistant Physician, on the work done in connection with the blood sedimentation reaction:—

The blood sedimentation reaction (S.R.) consists essentially in the measurement of the rate at which the corpuscles of citrated blood sediment in a vertically-placed tube.

The method adopted is that of Westergren. Blood is drawn from a vein into a syringe containing a 3·7 per cent. solution of sodium citrate, so that four parts of blood to one of the anti-coagulant solution are obtained. After mixing well, the citrated blood is sucked up to the 200 mm. mark on the Westergren pipette, which is allowed to stand vertically for an hour, when the amount of sedimentation is measured. A single reading, taken after one hour, has been considered of most practical value.

A study of the results in a series of 110 adult cases, not specially selected, shows that there is a close relationship between a high sedimentation rate (*e.g.*, 20 to 100 mm. in one hour) and a low degree of resistance to tuberculous infection, as shown by clinical and physical examination. In Table I is shown the S.R. in 85 pulmonary cases in relation to the stage of disease. It is a striking fact that, of 29 Stage I cases, only 1, or 3·5 per cent., showed S.R. greater than 10, whereas in Stage III group the corresponding figure for 30 cases was 57 per cent. The average figure for Stage I cases was 4 mm., the lowest and highest being 1 mm. and 20 mm. respectively. The average figure for Stage II cases was 15 mm. The average figure for Stage III cases was 27 mm., and here the lowest and highest figures were respectively 3 mm. and 105 mm. The wide variation in the figure for Stage III cases is probably a reflection of the fact that the Turban-Gerhardt classification (used here) takes into account only the anatomical changes present in the lungs and ignores systemic disturbance.

Table II gives the S.R. in 85 pulmonary cases in relation to the presence or absence of tubercle bacilli in the sputum. It shows that in sputum-negative cases only 12·5 per cent. had S.R. above 10 mm., whereas in sputum-positive cases the corresponding figure is 49 per cent.

Of systemic disturbance, fever and falling weight are probably of greatest significance. None of the 110 cases in the series showed fever at the time of testing. 22, or one-fifth of the total number, were either losing weight or at least failing to gain. Of these 22 cases, 46 per cent. had S.R. greater than 10 mm., whereas, of those who

were gaining in weight, only 21 per cent. had S.R. greater than 10 mm.

That the reaction is of no specific diagnostic value in tuberculosis is proved, since high readings are obtained in other pathological conditions (*e.g.*, in a case which proved to be one of sub-acute bacterial endocarditis, the S.R. was 82 mm.). At the same time our experience suggests that we have here a useful reflection of the patient's condition, and that, when read in conjunction with the previous history and with the various other clinical findings, the test may prove of value as a guide to prognosis and treatment.

TABLE I.

SEDIMENTATION TEST IN 85 CASES OF PULMONARY TUBERCULOSIS,
SHOWING RELATION TO THE STAGE OF THE DISEASE. CASES OF
SUSPECTED TUBERCULOSIS ARE GROUPED AS STAGE I.

S.R. mm.	Stage I.	Stage II.	Stage III.
1-5, -	24	17	10
6-10, -	4	0	3
	96.5 per cent.		43 per cent.
11-20, -	1	3	3
21-30, -	0	2	4
31-, -	0	4	10
	3.5 per cent.		57 per cent.
Total, -	<u>29</u>	<u>26</u>	<u>30</u>
Average, S.R.	<u>4 mm.</u>	<u>15 mm.</u>	<u>27 mm.</u>

TABLE II.

SEDIMENTATION REACTION IN 85 CASES OF PULMONARY TUBERCULOSIS,
SHOWING RELATION TO THE PRESENCE OR ABSENCE OF TUBERCLE
BACILLI IN THE SPUTUM.

S.R. mm.	Sputum -	Sputum +
1-5, -	31	20
6-10, -	4	3
	87.5 per cent.	
11-20, -	1	6
21-30, -	2	4
31-, -	2	12
	12.5 per cent.	
Total, -	<u>40</u>	<u>45</u>

TABLE III.

SEDIMENTATION REACTION IN RELATION TO WEIGHT. RESULTS ARE FROM 110 CASES
OF TUBERCULOSIS:— 85 PULMONARY, 25 NON-PULMONARY.

S.R. mm.	Weight +	Weight -
1-5, -	59	10
6-10, -	10	2
	79 per cent.	
11-20, -	6	2
21-30, -	6	1
31-, -	7	7
	21 per cent.	
Total, -	<u>88</u>	<u>22</u>

THE OPEN-AIR SCHOOL.

One has pleasure in recording the continued good results obtained at the Colony School. Our two teachers, Miss Lamont and Miss Bayne, report very satisfactory progress. Here we have a scheme of concurrent education and treatment. On discharge, the children are able to take their places alongside normal scholars of similar school age, having, to a large extent, made up the ground lost owing to ill-health. Kindergarten continued to take a prominent part in the school curriculum, and the sale of work at the end of the summer session showed evidence of the progress made. There was a splendid selection of rugs, raffia work, needlework, &c. Considerable progress has been made with the erection of the new school extension, and it should be ready for occupation in the near future. The average number of scholars attending school was 76.3, the maximum being 93 and the minimum 60.

BUILDINGS AND GROUNDS.

The Colony has accommodation for 250 patients, as follows:—

Pavilion I—Adult Males,	-	-	-	-	-	-	-	84
Pavilion II—Adult Males,	-	-	-	-	-	-	-	46
Boys,	-	-	-	-	-	-	-	33
								— 79
Pavilion III—Adult Females,	-	-	-	-	-	-	-	9
Children,	-	-	-	-	-	-	-	61
								— 70
Observation Block—Children,	-	-	-	-	-	-	-	17
								—
Total Beds,	-	-	-	-	-	-	-	<u>250</u>

The laying of tar-macadam in the vicinity of the recreation hall was completed this year, and all the sidewalks were tar-sprayed.

The interiors of all the pavilions were painted and the plaster work repaired.

RECREATION.—The recreation hall was largely used for concerts, whist drives, and the weekly cinematographic entertainments during the winter months. The films this year were hired from Messrs. Ideal Films, Ltd., at an even cheaper rate than last year, and they have been a very suitable type, mainly comedy.

The golf course, putting green, and croquet lawns were very popular during the summer months.

One would like to express our gratitude to all the kind friends who have so generously provided entertainments during the season.

RELIGIOUS SERVICES.—Every second Sunday afternoon a religious service was held in the recreation hall, and our thanks are due to the ten local clergymen who conducted those services.

METEOROLOGICAL REPORT.

I. RAINFALL.

Month.	Depth in Inches.	Month.	Depth in Inches.
January, - - -	6·71	July, - - -	4·3
February, - - -	2·32	August, - - -	5·9
March, - - -	2·94	September, - - -	7·0
April, - - -	2·80	October, - - -	6·20
May, - - -	1·83	November, - - -	5·42
June, - - -	3·45	December, - - -	1·4
		Total Rainfall for Year, -	<u>50·27</u>

This shows an increase of 4·37 inches on the previous year.

During the year there were 187 completely dry days, being 25 days less than last year.

II. WINDS.

North, - - -	52	South, - - -	51
North-East, - - -	21	South-West, - - -	44
East, - - -	55	West, - - -	84
South-East, - - -	19	North-West, - - -	39
<u>147</u>		<u>218</u>	

III.—TEMPERATURE.

The highest, lowest, and mean shade temperature for each month follows :—

	Highest Reading.	Lowest Reading.	Mean.
January, - - -	46	18	32
February, - - -	52	20	36
March, - - -	58	22	40
April, - - -	55	20	37·5
May, - - -	80	26	53
June, - - -	70	30	50
July, - - -	81	45	63
August, - - -	78	38	58
September, - - -	71	32	51·5
October, - - -	65	24	44·5
November, - - -	58	18	38
December, - - -	42	16	29

The mean temperature for the year, therefore, works out at 44·3.

STAFF.

In October, Dr. Robert B. Smith was appointed Assistant Physician, in place of Dr. Edgecombe, who left to take up private practice. Miss Gray, Matron, retired in May, under the Superannuation Scheme. She always had the interests of the Colony at heart, and her unsparing devotion has had a great deal to do with the success of the scheme. Miss Laird, Assistant Matron, was appointed Matron.

At the end of the year the Institution staff, in addition to the Physician-Superintendent, Assistant Physician, and Matron, included the following :—

Sisters, - - - - -	5	Typist, - - - - -	1
Staff Nurses, - - - - -	4	Clerks, - - - - -	2
Nurses, - - - - -	12	Electric Power Station, -	6
Supervisor, - - - - -	1	Handyman, - - - - -	1
Maids, - - - - -	26	Porter, - - - - -	1
School Teachers, - - - - -	2	Attendant, - - - - -	1
		Total, - - - - -	<hr/> 62 <hr/>

COLONY DEPARTMENTS.

The training conditions in all departments were similar to those of previous years, the patients being trained by experienced instructors. The working hours per day varied from two to six, according to the patient's physical condition.

GARDENS.

During the year 21 patients enrolled for training. This department is now fully equipped for the training of patients in all forms of gardening. The patients received a good training in the principles of market gardening. The produce was supplied to the Institution, and the surplus was sent to market or sold privately. The staff consisted of a head gardener, inside and outside foremen, 6 under gardeners, 1 casual worker, and 1 carter.

FOREST NURSERY.

47 patients enrolled for training in this department. The work, as usual, consisted in the sowing of seeds and the rearing of young trees. Most of the trees were sent to the Afforestation Scheme at Camps. Privet was grown for the hedges in the various housing

schemes, and the planting was done under the supervision of our head forester. There was a ready sale for the roses grown in this department. A great many private orders were obtained for trees and shrubs. Willows were also grown for the Basketmaking Department. The staff consisted of a head forester, who is also in charge of Camps, foreman forester, 5 under foresters, a carter, and a caretaker. The Apiary supplied 133 lbs. of honey to the Institution.

POULTRY FARM.

During the year 52 patients enrolled for training. The work in this department is very suitable for tuberculous patients, as it is essentially an open-air occupation and the duties are not arduous. There is a certificated poultrymaid in charge, and the average number of patients working was 20. The incubator house, with its accommodation for hatching 500 eggs, was fully utilised. The stock of poultry consisted of light and heavy breeds, and included Wyandottes, Rhode Island Reds, Black and White Leghorns. Owing to the exposed situation of the Poultry Farm, it was found that these were the varieties which thrived best. A few turkeys were hatched and reared for the Christmas market.

Altogether, during the year, 1,050 chickens, 26 turkeys, and 8 ducks were hatched, an increase of 32 on the previous year. At the end of the year the stock consisted of 203 pullets, 335 hens, 22 cockerels, 12 ducks, 2 drakes—total, 574 fowls.

PIGGERY.

The work in this department was done entirely by patients, under the supervision of the Farm Manager. A fully-trained patient is in charge, at a wage of 10s. per week. 18 patients enrolled for training, the average number working at one time being 6. The stock at the end of the year numbered 111 (an increase of 10 on the previous year), as follows:—1 large white boar, 1 large black boar, 2 large white brood sows, 2 large black brood sows, 11 middle white brood sows, 27 crossed young pigs under six weeks, and 67 crossed feeding pigs under six months.

The majority of the pigs reared were a cross between the large black and the middle white, as it was found that this type had a ready sale and complied with most of the butchers' requirements. This department continued to show a good financial return, and was one of the most profitable in the Colony.

GUINEA-PIG DEPARTMENT.

This department continued to supply the County Laboratory, the work being done by two patients.

Sold,	57
Stock at end of year,	47

INSTITUTION WORKSHOP.

This department, organised for the carrying out of general Colony repairs, was carried on successfully during the year, patients with previous occupational experience being employed. 7 patients came under this category.

GARAGE.

The garage continued to be worked in conjunction with the Motor Repair Department, all the work in connection with our two motor lorries being done by trainees from this department—a good example of the value of Colony training. To stimulate healthy rivalry, a trainee who had completed his training was put in charge of each of our two lorries. This arrangement has worked very satisfactorily, the lorries always being clean and in good condition. The wooden lattice-shuttered doors have proved rather unsatisfactory, being stiff and difficult to raise, with a consequent strain on the patients. The question of erecting sliding doors should be considered.

FARM.

The farm continued to supply milk to the Colony and the County Hospital, Blantyre. The stock is a pedigree Ayrshire herd, and we were again licensed to produce Certified Milk (the highest grade). The average marks for the routine veterinary inspection of the stock, byres, &c., reached the high figure of 97 per cent. The herd again passed the tuberculin test, there being no reactors, and we have now had a tubercle-free stock for several years. Owing to a temporary shortage of milk towards the end of the year, two additional cows were purchased.

We were members of the Scottish Milk Records Association, and the regular examination of the tester showed that the average percentage of butter fat was 3.61, and 6 cows yielded over 1,000 gallons of milk per annum, the average for the whole herd being 807 gallons.

As in the previous year, all our milking utensils were sterilised in the steam chest, and this, with in addition clean milking methods, has enabled us to attain a very high standard of cleanliness. The

routine bacteriological examination of the milk showed that a composite sample contained only 390 blood-heat organisms per c.c., and coliform bacilli were absent in one-tenth of a c.c.

Miss Taylor, N.D.D., was appointed dairymaid in November. The staff consisted of Farm Manager, dairymaid, assistant dairymaid, byreman, milkers, 2 ploughmen, and 1 odd man.

Stock at end of year was as follows:—1 stock bull rising 5 years, 1 stock bull rising 2 years, 3 bull stirks, 39 cows, 29 heifers, 7 calves, 7 work horses, and 1 filly.

INDUSTRIAL WORKSHOPS.

These workshops still occupy a very important place in the scheme of the Colony treatment of tuberculosis, and the training comes under the category of vocational training. The various forms available have been very suitable for the patients.

As previously stated, the minimum period for training is twelve months. The trainees work for six hours a day, divided into two spells of three hours—9-12 and 2-5—and there is an instructor in charge of each department. There is accommodation for 36 trainees, as follows:—Motor, 12; Cabinetmaking, 12; Boot Repairing, 6; Basket-making, 6. All the trainees were selected cases; that is to say, they showed no evidence of active disease and were in fairly good physical condition. The civilian trainees were paid 5s. a week after a probationary period of one month. This did not apply to ex-service-men who were in receipt of a pension.

Although training is our first consideration, it is gratifying to record a satisfactory position from the commercial point of view. The receipts in the various departments of the workshops totalled over £1,363, an increase of £183 on last year.

One is very pleased to record the excellent results obtained by the trainees in the various technical examinations, and these reflect great credit on the work of our instructors. Details are given in the reports of the departments.

MOTOR DEPARTMENT. — This continued to be one of the most popular, and the majority of the trainees, on completion of their training, had no difficulty in finding work. The Wolseley and Ford cars were used regularly for demonstration purposes. Our thanks are due to the Ford Motor Company for replacing the original Ford chassis with the latest model, no charge being made. Our Wolseley car is now in a very dilapidated condition, and the question of obtaining another car will have to be considered in the near future. In addition to the routine lectures and demonstrations by the

instructor, there was a large amount of repair work done in this department, although the orders were quite unsolicited. The eight trainees who entered for the Royal Scottish Automobile Club driving certificate were all successful. This certificate is obtained after a written examination and a practical driving test in the busy streets of Glasgow, and it ensures that the trainee is thoroughly proficient before leaving the Colony. 21 patients enrolled for training.

CABINETMAKING DEPARTMENT.—This was one of the busiest departments, the trainees being very fully employed during the year. Altogether the sales for the year amounted to approximately £650, an increase of £115 on the previous year. Although the department was very successful from a commercial aspect, it was felt that, to make the training more satisfactory from the trainees' point of view, some alteration should be made in the scheme of training. It has now been arranged to give special instruction in veneering and in the making of the finer articles of furniture that cannot be made by machinery. It is hoped to give details of the results of this revised scheme in a subsequent report. Six trainees entered for the examination in Cabinetmaking, Grade I, of the City and Guilds of London Institute. All were successful in obtaining first-class certificates, and one obtained first place, being awarded the bronze medal. This is very satisfactory when one considers that candidates from all over the world entered for this examination. 22 patients enrolled for training.

BOOT REPAIRING DEPARTMENT.—The trainees in this department were kept steadily employed during the year. A large amount of work was done, the particular feature being the increase in the amount of special repair work; *e.g.*, rubber Wellingtons. Repairs amounting to £278 were executed, an increase of £18 on last year. 11 patients enrolled for training.

BASKETMAKING DEPARTMENT.—There was a steady demand for the articles made in this department. The trainees were able to make more elaborate articles, including chairs, tables, &c. As stated in a previous report, there is a dearth of basketmakers in Scotland, and consequently a trainee has good prospects of earning a livelihood in this occupation. Three trainees entered for the examination in Basketmaking, Grade I, of the City and Guilds of London Institute. All were successful. Two obtained second-class certificates, and one a first-class certificate and second highest marks in the examination. Seven patients enrolled for training. Goods to the value of £291 were sold, an increase of £11 on last year.

HAIRMYRES COLONY,

February, 1928.

Veterinary Inspection of Dairy Herds.

The veterinary inspection of dairy herds was carried out by the County Veterinary Inspector and an assistant.

The record shows that 938 dairy herds, containing 18,605 cows, were examined. As on former occasions, samples of milk were drawn from all udders which, on examination, showed suspicious conditions. In this way 456 samples of milk were taken, and sent to the Bacteriological Laboratory, where, after examination, 50 were found to contain tubercle bacilli, 133 were found to contain other infectious organisms, and 273 gave negative results.

In all cases where infectious organisms were found in the milk samples, certificates were granted by the Veterinary Surgeon in terms of Section 4 (2) of the Milk and Dairies (Scotland) Act, 1914. Where tubercle bacilli were present, arrangements were made with the owners to have the cows slaughtered immediately, in terms of Article 5 (1) of the Tuberculosis Order, 1925. In all other cases where cows were found to be suffering from "disease liable to infect or contaminate the milk" (*e.g.*, streptococci found in the milk sample), communications were at once issued to the owners pointing out their responsibilities under the Milk and Dairies Act, and inquiring as to the arrangements they were making to comply with the requirements of Section 13 (1) and (2), and Section 24 (1) and (2) of the Act.

Cows with other abnormal conditions of the udder were also recorded, and the results are shown in the following table:—

INSPECTION OF DAIRY HERDS, 1927, CLASSIFIED ACCORDING TO PARISH.

PARISH.	Herds Registered.	Herds Inspected.	Cows Inspected.	Cows with Abnormal Conditions of Udder.						Samples of Milk.			
				Tubercle.	Atrophy.	Mammitis.	Induration N.T.	Eruption on Teats.	Total.	Number taken.	Number found to contain Tubercle bacilli.	Number found to contain other infectious organisms.	Number negative.
Avondale, - -	133	159	3,957	12	90	23	48	3	176	86	14	24	48
East Kilbride, -	95	130	3,212	5	134	19	25	5	188	63	5	24	34
Glasford, - -	48	65	1,302	1	42	6	14	4	67	31	1	10	20
Stonehouse, -	25	36	815	5	29	5	6	2	47	20	0	5	9
<i>First Division,</i> -	301	390	9,286	23	295	53	93	14	478	200	26	63	111
Blantyre, - -	21	29	374	...	6	4	3	1	14	7	...	2	5
Bothwell, - -	67	90	1,444	6	19	6	19	3	53	57	8	15	34
Cambuslang, -	20	38	684	2	27	1	12	2	44	15	2	6	7
Cambusnethan, -	50	63	1,183	1	36	7	16	6	66	29	1	10	18
Dalserf, - -	17	25	453	2	13	5	11	1	32	24	2	9	13
Dalziel, - -	6	9	247	...	9	2	1	...	12	1	...	1	...
Hamilton, - -	45	55	1,098	...	42	4	19	3	68	26	...	5	21
<i>Second Division,</i>	226	309	5,483	11	152	29	81	16	289	159	13	48	98
New Monkland, -	69	103	1,462	3	19	2	5	1	30	35	3	5	27
Old Monkland, -	29	39	801	4	7	1	10	...	22	22	4	8	10
Shotts, - -	62	97	1,573	4	15	6	13	1	39	40	4	9	27
<i>Third Division,</i> -	160	239	3,836	11	41	9	28	2	91	97	11	22	64
<i>Middle Ward,</i> -	687	938	18,605	45	488	91	202	32	858	456	50	133*	273

* These samples were taken from 116 cows.

The total figures for abnormal conditions of the udder include 37 cases of suspected tubercle which gave negative results, and are therefore classified as induration.

These abnormal conditions, and the number of cows affected, were as follows:—Tubercle, 45; atrophy, 488; mammitis, 91; induration N.T., 202; and eruption on teats, 32; a total of 858, or 4.6 per cent. of the total cows examined.

MATERNITY AND CHILD WELFARE.

Staffing Arrangements.—A note of the staff engaged in Maternity and Child Welfare work is contained at the beginning of the Report on the Midwives (Scotland) Act. In November the Tollcross and District Nursing Association intimated that they were unable to continue the visitation of mothers and infants in that area; this work is being overtaken by our own staff. Part-time assistance is still given by seven District Nursing Associations.

Births Registered. — There were registered the births of 5,640 infants—males, 2,879; and females, 2,761—which is equivalent to a birth-rate of 23·9 per 1,000 of the population. This is the lowest birth-rate which has ever been recorded in the Middle Ward District, and shows a decrease of 1·1 compared with the rate for 1926. The rates for the past five years are shown in Table A, which also shows the rates for decennial periods from 1891 to 1920. There were 379 illegitimate births—males, 196; and females, 183—which is equal to 6·7 per cent. of the total births.

Births Notified.—The number of statutory notifications received was 5,335, and of these 5,134 were notifications of live-born children, the remainder — 201 — being notifications of still-births. The percentage of births notified to births registered was 94·5, excluding still-births. In addition, 248 notifications were received as a result of letters addressed to parents, and 131 births were brought to our notice by the Nurse Health Visitors, giving a gross total of 5,714. The sources of notification were as follows:—

Doctors.	Midwives.	Handy- women.	Parents.	Institutions.	Other Sources.	Health Visitors.	Total.
1,257	3,049	26	507	676	68	131	5,714

To the number of births notified there falls to be added the births of 295 infants which occurred in institutions in the Middle Ward, but whose parents resided in areas outwith the Middle Ward District; 62 of these were notified from Bellshill Hospital, 232 from the Coatbridge and Airdrie Maternity Home, and 1 from Omoa House, Cleland.

Table M I shows the births registered, births notified, visits made by the Nurse Health Visitors, the attendant at confinement as ascertained at the first visit, deaths registered, and the infantile death-rate, the information being tabulated according to registration districts.

BIRTHS REGISTERED AND NOTIFIED. NUMBER OF VISITS MADE BY NURSE HEALTH VISITORS AND INFANTILE MORTALITY RATES FOR 1927.

REGISTRATION DISTRICTS.	BIRTHS.			NUMBER OF VISITS.			ATTENDANT AT CONFINEMENT.			INFANT DEATHS.	
	Registered. Legiti- mate.	Notified.		First.	Subsequent.		Doctor alone or with Hardy- Midwife.	Midwife.	Hand- woman.	Instit.	Rate per 1,000 Births.
		Alive.	Still- born.		Infants.	Mothers.					
Avondale, - - - - -	87	4	85	3	77	622	6	25	730	4	43.9
East Kilbride, - - - - -	94	9	97	1	93	516	133	22	764	18	77.6
Glasford, - - - - -	25	2	28	-	29	166	2	2	199	3	111.1
Stonehouse, - - - - -	83	7	87	2	85	728	9	4	826	9	100.0
<i>First Division, - - - - -</i>	<i>289</i>	<i>22</i>	<i>297</i>	<i>6</i>	<i>284</i>	<i>2,032</i>	<i>150</i>	<i>53</i>	<i>2,519</i>	<i>34</i>	<i>77.1</i>
Blantyre, - - - - -	483	35	510	12	525	2,365	542	261	3,693	2	75.2
Bothwell, - - - - -	464	32	487	21	497	4,675	200	730	6,102	3	108.8
Bellshill, - - - - -	557	36	599	26	644	6,110	92	542	7,388	9	104.5
Holytown, - - - - -	485	28	492	18	492	3,798	165	567	5,022	4	77.9
Cambuslang, - - - - -	562	35	571	23	552	4,245	64	667	5,528	10	58.6
Cambusnethan, - - - - -	370	21	371	8	415	2,779	51	190	3,435	2	81.8
Calderhead, - - - - -	119	8	125	7	93	141	9	46	289	5	94.4
Dalsersf, - - - - -	121	12	139	6	145	1,174	2	31	1,352	3	112.7
Larkhall, - - - - -	317	28	329	11	341	2,578	16	203	3,138	10	86.9
Dalziel, - - - - -	20	-	28	-	28	254	2	9	293	1	100.0
Hamilton, - - - - -	170	13	190	8	200	2,075	31	112	2,418	6	92.9
<i>Second Division, - - - - -</i>	<i>3,668</i>	<i>248</i>	<i>3,841</i>	<i>140</i>	<i>3,932</i>	<i>30,194</i>	<i>1,174</i>	<i>3,358</i>	<i>38,658</i>	<i>28</i>	<i>86.3</i>
New Monkland, - - - - -	358	26	377	16	374	2,360	28	199	2,961	3	80.7
Old Monkland (East), - - - - -	70	9	75	1	78	489	11	94	672	2	101.2
Do. (Coatbridge) - - - - -	51	5	57	3	66	204	-	15	285	2	160.6
Do. (West), - - - - -	303	30	325	22	294	2,385	4	63	2,746	-	90.9
Shotts (East), - - - - -	143	10	143	2	148	291	2	28	489	2	117.6
Do. (Middle), - - - - -	68	6	71	2	58	457	5	47	567	5	94.5
Do. (Calderhead), - - - - -	180	16	191	5	216	463	6	128	813	2	107.1
Do. (West), - - - - -	96	5	100	4	115	824	12	69	1,020	1	59.4
Do. (North), - - - - -	35	2	36	-	27	97	9	12	145	-	27.0
<i>Third Division, - - - - -</i>	<i>1,304</i>	<i>109</i>	<i>1,375</i>	<i>55</i>	<i>1,376</i>	<i>7,570</i>	<i>77</i>	<i>655</i>	<i>9,678</i>	<i>7</i>	<i>92.7</i>
<i>Total, - - - - -</i>	<i>5,261</i>	<i>379</i>	<i>5,513</i>	<i>201</i>	<i>5,592</i>	<i>39,796</i>	<i>1,401</i>	<i>4,066</i>	<i>50,855</i>	<i>48</i>	<i>87.4</i>
	5,640			5,174							

Reference to the table shows that the total number of domiciliary visits made by the staff during the year was 50,855, a decrease of 6,546 compared with the previous year. The special visits referred to numbered 4,066, and were made in connection with the following conditions:—Ante-natal cases, 1,868; infant death inquiries, 149; ophthalmia neonatorum, 612; conjunctivitis, 22; squint, 769; puerperal fever, 37; whooping-cough, 36; adopted babies (first and revisits), 154; maternal deaths, 5; measles, 4; chickenpox, 3; ear, nose, and throat, 258; rickets, 1; corneal ulcer, 6; blepharitis, 5; and inquiries regarding accounts under Midwives Act, 137.

Particulars connected with 5,394 live infants have been recorded. Of this number it has been found that 1,238 (22·9 per cent.) were attended by medical practitioners alone, or assisted by neighbours or relatives; 1,217 (22·5 per cent.) by doctors assisted by certified midwives; 2,163 (40·1 per cent.) by certified midwives; 71 (1·3 per cent.) by women not on the midwives' roll; 659 (12·2 per cent.) occurred in institutions; and in the case of 46 (0·8 per cent.) the birth took place before the arrival of an attendant.

Of the 201 still-births notified, particulars of 198 have been recorded, and the attendant at birth in these were as follows:—71 (35·8 per cent.) by doctors and midwives; 42 (21·2 per cent.) by doctors alone, or assisted by handywomen; 32 (16·1 per cent.) by midwives alone; 50 (25·2 per cent.) in institutions; 1 (0·5 per cent.) by a handywoman; and 2 (1·0 per cent.) B.B.A.

As pointed out in the previous year's report, the above figures are those obtained from the Nurse Health Visitors' records, and differ to some extent from the figures in Table I of the report under the Midwives (Scotland) Act, which are obtained from the notification forms. Comparison with the previous years shows that there is remarkably little change in the figures giving the classification of the attendants at birth.

		1923	1924	1925	1926	1927	
Cases attended by Midwives,		47·9	44·0	43·0	39·9	39·2	per cent.
Do.	Doctors and						
	Midwives,	50·4	22·5	22·6	22·4	23·0	„
Do.	Doctors,	—	24·8	24·5	25·1	22·8	„
Do.	Handywomen,	1·5	1·6	0·6	0·6	1·2	„
Do.	Institutions,	—	5·8	8·2	11·1	12·6	„
Do.	B.B.A.,	—	1·1	0·7	0·6	0·8	„

Feeding at Age of Six Months.—5,449 records, relating to infants born between July, 1926, and June, 1927, were investigated to determine the feeding at the age of six months, and the results are classified as follows:—Wholly breast fed, 2,941 (64·3 per cent.); partially breast fed, 255 (5·5 per cent.); artificially fed, 1,378 (30·1 per cent.); died or removed, 803; and information incomplete, 72.

INFANTILE MORTALITY.

Deaths of infants under the age of one year numbered 493, which is equivalent to an infantile mortality rate of 87·4 per 1,000 births, compared with 82·5 for the previous year. The infantile mortality rate in each registration district is set forth in Table M I.

Table M II shows the deaths arranged according to group-causes and age-periods:—

TABLE M II.

CAUSE OF DEATH.	AGE PERIODS.										Rate per 1,000 Births.
	WEEKS.				Total.	MONTHS.				Total.	
	- 1	1-2	2-3	3-4		- 4	1-3	3-6	6-9			9-12	- 12
1. Prematurity, - -	94	4	5	5	108	7	—	—	—	115	20·30
Congenital Malfor- mation, - -	8	5	2	—	15	3	—	—	—	18	3·19
Congenital Heart, -	7	2	1	—	10	2	—	2	—	14	2·48
Atelectasis, - -	9	—	1	—	10	—	—	—	—	10	1·77
Injury at Birth, -	4	—	—	1	5	—	—	—	—	5	0·88
2. Atrophy, Debility, and Marasmus, -	24	3	7	6	40	14	8	3	2	67	11·87
3. Diarrhoea, - -	1	—	1	2	4	8	10	7	2	31	5·49
Other Digestive Diseases, - -	—	—	1	—	1	4	—	—	—	5	0·88
4. Pneumonia, - -	1	2	1	2	6	17	24	24	18	89	15·78
Bronchitis, - -	—	2	2	2	6	5	7	4	3	25	4·43
Other Respiratory Diseases, - -	1	—	—	—	1	1	1	1	—	4	0·70
5. Tuberculosis—											
Meningeal, - -	—	—	—	—	—	1	1	5	1	8	1·41
Abdominal, - -	—	—	—	—	—	1	1	2	—	4	0·70
6. Convulsions, - -	4	1	1	—	6	6	8	3	2	25	4·43
Hydrocephalus, -	1	—	—	—	1	—	1	—	—	2	0·35
Meningitis, - -	—	—	—	—	—	2	2	1	2	7	1·24
7. Measles, - -	—	—	—	—	—	—	1	3	2	6	1·06
Whooping-cough, -	—	—	—	—	—	1	6	7	3	17	3·01
Diphtheria, - -	—	—	—	—	—	—	—	1	—	1	0·17
Erysipelas, - -	—	—	—	—	—	1	—	—	—	1	0·17
8. Syphilis, - -	—	—	—	—	—	1	—	—	—	1	0·17
9. Violence, - -	—	—	—	—	—	—	—	—	3	3	0·53
Suffocation (Over- lying), - -	—	1	—	—	1	1	—	—	—	2	0·35
10. All other causes, -	3	—	—	2	5	10	8	5	5	33	5·85
	157	20	22	20	219	85	78	68	43	493	87·41
Rate per 1000 births.	27·83	3·54	3·90	3·54	38·8	15·07	13·82	12·05	7·62	87·41	

MATERNAL MORTALITY.

The maternal deaths, including 20 from puerperal septicæmia, numbered 33, which is a decrease of 6 compared with the previous year. In the following table the group-causes, together with the number of deaths referable thereto for each year since 1910, are shown. The registered births and the birth and death-rates per 1,000 births are also given.

Table M IV shows the total number of births notified, the number of institutional births and maternal deaths, and the institutional confinements and maternal mortality rates per 1,000 births since the year 1916 :—

TABLE M IV.

Year.	Total Births Notified.	Institution Births.	Maternal Deaths.	Institution Confinements per 1,000 Births.	Maternal Mortality per 1,000 Births.
1916	6,483	48	35	7·40	5·39
1917	5,944	15	21	2·52	3·53
1918	6,385	37	23	5·79	3·60
1919	6,308	58	37	9·19	5·86
1920	7,718	174	44	22·54	5·70
1921	7,229	267	45	36·92	6·22
1922	6,478	238	54	36·74	8·33
1923	6,245	314	50	50·28	8·00
1924	6,343	383	34	60·38	5·36
1925	6,343	523	39	82·45	6·14
1926	6,115	647	39	105·80	6·37
1927	5,714	674	33	100·45	5·77

PUERPERAL SEPTICÆMIA.

The number of cases of puerperal septicæmia reported during the year was 82, representing an incidence rate of 14·5 per 1,000 births; this is an increase of 5·3 per 1,000 births, compared with the previous year's figure. In addition, 1 case was notified from the Coatbridge and Airdrie Maternity Home, but her usual place of residence is in the Burgh of Coatbridge.

The following table shows the incidence and death-rates since 1916 :—

TABLE M V.

Year.	Total Cases.	Rate per 1,000 Births.	No. of Deaths.	Fatality Rate.	Death-Rate per 1,000 Births.
1916	21	3·1	11	52·4	1·6
1917	22	3·6	10	45·4	1·6
1918	14	2·1	5	35·7	0·7
1919	37	5·7	15	40·5	2·3
1920	60	7·9	25	41·6	3·3
1921	68	9·6	25	36·7	3·5
1922	69	10·8	20	28·9	3·1
1923	62	9·9	17	27·4	2·7
1924	54	8·6	15	27·7	2·4
1925	53	8·5	19	35·8	3·0
1926	55	9·2	16	29·0	2·7
1927	82	14·5	20	24·3	3·5

73, or 89·0 per cent., of the cases were removed for treatment to the County Hospital, Motherwell.

In 13 cases a doctor alone, or with the assistance of a neighbour or relative, conducted the confinement, and delivery was effected by means of forceps in 6 cases. In 26 cases a doctor and certified midwife were in attendance, and in 19 of these cases forceps were used. In 23 cases the attendant was a certified midwife, and in 1 a handywoman was present at birth; 12 of the births took place in an institution, while in 7 cases (4 B.B.A., and 3 abortions) there was no attendant present. In the 12 institution cases the nature of confinement was as follows:—Normal, 4; caesarean section, 1; breech presentation, 1; transverse presentation, 1; placenta prævia, 1; craniotomy, 1; induction of labour, 1; still-birth, 1; no information, 1.

The incidence of the disease according to the number of pregnancy at which it occurred was as follows:—

No. of Pregnancy,	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total.	
No. of Cases,	-	25	8	15	8	3	7	4	1	4	2	2	1	1	—	1	82

The age distribution of the cases and deaths was :—

	Years	Under 20	20-25	25-30	30-35	35-40	Over 40	Total.	
Cases,	-	-	8	16	24	14	12	8	82
Deaths,	-	-	2	1	6	4	4	3	20

Only in 4 cases were the mothers unmarried.

STILL-BIRTHS.

The total number of notifications of still-births received during the year was 201, and those were sent in by :—Doctors, 47 ; midwives, 87 ; health visitors, 12 ; parents, 4 ; institutions, 51.

Inquiries by the Nurse Health Visitors were made into 198 cases, and the following particulars obtained :—

Maturity.—The births occurred at full term in 131 cases, in 21 at the eighth month, in 33 at the seventh month, and 7 at the sixth month ; in 6 cases the duration of pregnancy was indefinite.

Attendant at Birth.—The attendant at birth was as follows :—Doctor and midwife, 71 ; doctor alone or with unqualified woman, 42 ; midwife alone, 32 ; handywoman, 1 ; institutional cases numbered 50 ; and B.B.A., 2.

Nature of Confinement.—The confinement was ascertained to have been normal in 130 cases and abnormal in 68, instrumental delivery taking place in 48 of the latter.

The pregnancy at which still-birth occurred is shown as follows :—

											11th and	Not	
Pregnancy, -	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	over.	stated.	Total.
Still-births, -	47	18	17	16	14	9	13	12	7	11	23	11	198

Previous Still-Births.—In 149 cases no previous still-births had occurred ; in the remaining 49 cases previous still-births had taken place, viz. :—1 in 20 cases ; 2 in 18 ; 3 in 4 ; 4 in 2 ; 6 in 4 ; and 7 in 1.

Employment of Mother.—Only in 6 cases were the mothers engaged in other than domestic duties.

Age Distribution.—

-20	20-25	25-30	30-35	35-40	40-45	Unstated.	Total.
8	28	43	40	38	32	9	198

Health of Mothers during Pregnancy.—

Good, 124 ; fair, 45 ; poor, 17 ; unstated, 12 ; total, 198.

Probable Cause of Still-Birth.—In 90 cases it was difficult or impossible to determine any definite cause which might result in still-birth, and inquiry into the majority of those did not show any departure from normal health in the case of the mother or any abnormality at the time of confinement. In 108 cases the probable causes

of still-birth might be stated thus:—Delayed labour, 11; abnormal presentation, 16; prolapse of cord, 5; albuminuria and eclampsia, 7; placenta prævia, 4; ante-partum hæmorrhage, 12; hydramnios, 5; injury to mother, 2; ill-health of mother, 3; prematurity, 35; craniotomy, 3; hydrocephalus, 2; meningocele, 1; anencephalus, 2.

OPHTHALMIA NEONATORUM AND DISCHARGING EYES.

In previous years there has been included under the heading, "Ophthalmia Neonatorum," all cases of discharging eyes, irrespective of whether they were notified or not. It was explained in a previous report that the unnotified cases were discovered either by the Health Visitor in the course of her routine visits or from a scrutiny of the Laboratory returns, which record all eye specimens received from the County area. From a statistical point of view this procedure was open to question, as the ophthalmia rate was exaggerated; from an administrative point of view it was justifiable, in that every case of discharging eyes, however slight, was treated with equal seriousness until a definite diagnosis was established. It is now proposed to distinguish two categories of inflammation of the eyes of the newly-born, the classification being based on the simple test of whether a statutory notification has been received or not. It will thus be possible to compare the notification rate in one area with another, although it is admitted that the standard of diagnosis in different areas will still remain widely divergent. Amongst those notified there will be cases which are not examples of true ophthalmia; conversely, among the unnotified there will be instances of true ophthalmia. The procedure whereby every case is treated with equal gravity will remain unchanged. For the purpose of comparing the present year with previous years, it is necessary only to take the sum of the figures.

Notified Cases of Ophthalmia Neonatorum.—Cases, 98; rate per 1,000 births, 17·3; admissions to hospital, 11.

Of the total cases reported, 52 (53 per cent.) were notified by doctors; 14 (14·2 per cent.) by certified midwives; 9 (9·1 per cent.) by both doctors and midwives; 22 were notified from the County Hospital, Bellshill, and 1 from another Local Authority. In 31 cases a doctor alone, or with the assistance of a neighbour, was in attendance at the confinement; that is, the disease developed in connection with 2·4 per cent. of the total number of confinements conducted by doctors. Doctors and midwives were present at the

birth in 17 cases, representing 1·3 per cent. of the total cases attended by doctors and midwives. A certified midwife alone was present at the birth in 24 cases, which is 1·1 per cent. of the total midwives cases. In 1 case the attendant at birth was a neighbour. 22 cases occurred in institutions, and in 3 instances the confinement took place before the arrival of an attendant.

In the following table the 98 notified cases are classified according to the severity of the disease and to the bacteriological findings:—

	Slight.	Moderate.	Severe.	Total.
Gonococcal, - - - - -	2	—	2	4
Other organisms, - - - - -	25	2	3	30
Pus but no organisms, - - - - -	19	6	—	25
No pus no bacteria, - - - - -	11	—	—	11
No swab, - - - - -	24	3*†	1*	28
	81	11	6	98

Discharging Eyes. — The number of cases of discharging eyes discovered was 83, 3 of these being removed for hospital treatment. The attendant at birth was as follows:—Doctor alone or with the assistance of a neighbour, 14; doctor and midwife, 4; midwife alone, 22; and handywoman, 2. In 40 cases the births occurred in Institution, and in one the baby was born before the arrival of an attendant.

The severity of the condition and the bacteriological findings are shown below:—

	Slight.	Moderate.	Severe.	Total.
Gonococcal, - - - - -	—	1	—	1
Other organisms, - - - - -	47	6	—	53
Pus but no organisms, - - - - -	22	—	1	23
No pus no bacteria, - - - - -	1	—	—	1
No swab, - - - - -	5	—	—	5
	75	7	1	83

BLINDNESS FOLLOWING OPHTHALMIA NEONATORUM.

In 2 instances some degree of impairment of vision resulted from the disease, and in both cases the confinement had taken place in an institution. This is of interest in so far as it bears out other

* 3 infants removed to hospital before swab could be taken.

† 1 infant moribund.

observations, that even with great care and the prophylactic use of silver nitrate, ophthalmia may result and may lead to blindness. The cases were apparently of quite different types, as in one ulceration of the cornea rapidly followed the first appearance of inflammation, while in the other an apparently mild infection appeared to completely clear up, to be followed in a few days by recurrence of inflammation and corneal ulceration. The details of the cases are as follows:—Baby L, born 5-10-27; slight inflammation and discharge on 11-10-27; rapid increase of discharge and ulceration of the cornea, 13-10-27; result—right eye normal, left eye marked impairment of vision. Baby M, born 18-8-27; onset of ophthalmia, 24-8-27; described as a mild infection, which cleared up completely on 7-9-27; recurrence of discharge on 9-9-27, and cloudiness of the cornea on 11-9-27; result—opacities of both cornea with some impairment of vision of both eyes.

ANTE-NATAL CASES.

The importance of ante-natal care and supervision is fully appreciated by the Local Authority, and it is hoped that some development of the work may be possible. During the year the activities of the department in this connection may be summarised as follows:—

The Nurse Health Visitors made 1,868 domiciliary visits to expectant mothers, compared with 1,826 in the previous year.

At the Child Welfare Centres 414 patients attended for the first time, and the total visits numbered 678, the total attendances during 1926 being 524.

Ante-natal cases were admitted to the various institutions as follows:—County Hospital, Bellshill, 142; Calderbank Convalescent Home, 89 (including 26 cases transferred from Bellshill Hospital); and Coatbridge and Airdrie Maternity Home, 2.

At the out-patient department, Bellshill Hospital, 299 expectant mothers presented themselves for examination.

At the County laboratory 193 specimens of urine from ante-natal patients were examined, and of these, 175 were sent by midwives (71 positive), and 18 by members of the Public Health Staff (6 positive). In addition, 510 specimens were examined at the Child Welfare Centres, and 101 of these were positive.

CHILD WELFARE CENTRES.

Table M VI shows the attendance of mothers, infants, and children at the Child Welfare Centres during 1927 :—

TABLE M VI.

Centres.	No. of Sessions.	Mothers.	Total Attendances.	
			Children.	
			Under 1 year.	Over 1 year.
Baillieston, - - -	46	3,722	1,623	1,855
Bellshill, - - -	48	3,347	1,487	1,946
Blantyre, - - -	48	2,737	1,277	1,536
Cadzow, - - -	23	890	522	477
Cambuslang, - - -	48	3,294	1,578	1,711
Chapelhall, - - -	47	1,775	804	967
Larkhall, - - -	48	2,526	1,245	1,437
Newarthill, - - -	48	3,145	1,439	1,602
Newmains, - - -	47	2,621	1,507	1,504
New Stevenston, - - -	48	2,637	1,147	1,463
Shotts, - - -	48	2,469	1,527	1,276
Tannochside, - - -	36	1,916	907	1,055
Uddingston, - - -	48	3,958	1,817	2,211
		35,037	16,880	19,040

At Blantyre, Bellshill, Larkhall, and Cambuslang Centres special sessions were held for the purpose of dealing with applications for assistance, and a weekly meeting of the ordinary Centre was maintained. At all the other places the ordinary Centre was held on alternate weeks practically throughout the whole year.

MEDICAL CONSULTATIONS.

Table M VII shows the number of sessions held, and the number of first visits and re-visits made by mothers, infants, and children.

TABLE M VII.

Centre.	MOTHERS.				CHILDREN.			
	No. of Sessions.	Ante-natal.		Post-natal and others.	Total.	Under 1 year.		Over 1 year.
		1st Visit.	Total.			1st Visit.	Total.	
Baillieston, - - -	21	16	18	15	23	100	142	129
Bellshill, - - -	41	25	38	65	104	175	324	208
Blantyre, - - -	45	132	211	133	219	145	317	197
Cadzow, - - -	17	2	2	9	9	16	37	25
Cambuslang, - - -	81	106	198	152	269	176	334	256
Chapelhall, - - -	24	3	7	13	22	31	70	41
Larkhall, - - -	40	42	74	72	109	145	282	142
Newarthill, - - -	23	12	17	26	40	76	121	55
Newmains, - - -	40	24	30	36	70	95	261	90
New Stevenston, - - -	28	9	17	14	20	83	152	86
Shotts, - - -	43	31	50	38	87	109	290	120
Tannochside, - - -	16	2	4	18	25	38	72	47
Uddingston, - - -	23	10	12	24	27	41	63	56
	414	678	615	1,024	1,230	2,465	1,452	2,770

Infants and Children.—Table M VIII shows the illness recorded in the case of infants and children, and it should be noted that the figures refer to the number of cases of each disease for which the patient thought it necessary to consult the doctor. These figures do not correspond with the total attendances, since repeated consultations for the same disease represent only one illness, nor, on the other hand, do they correspond with the first attendances, as a child may have made a re-visit for a new ailment, in which event both illnesses were recorded.

TABLE M VIII.
ILLNESSES OF INFANTS AND CHILDREN ATTENDING CENTRES.

CENTRE	Gastro-Intestinal.	Intestinal Worms.	Respiratory.	Tuberculosis.	Skin.	Ear, Nose, and Throat.	Eyes.	Teeth.	Rickets.	Hernia.	Phimosis.	Anal Prolapse.	Club foot.	Infantile Paresis.	Injury to Limb.	Cleft Palate.	Others.	Total
Baillieston, -	117	—	39	3	28	12	9	1	5	5	1	—	—	1	—	—	14	235
Bellshill, -	193	1	40	—	43	30	17	4	21	9	3	—	—	1	—	—	11	373
Blantyre, -	183	9	60	5	35	34	11	12	37	16	5	4	—	1	3	—	50	465
Cadzow, -	20	—	4	—	3	2	1	1	2	—	—	—	—	—	—	—	7	40
Cambuslang, -	153	12	65	4	74	27	41	28	70	20	9	2	—	3	1	—	66	575
Chapelhall, -	38	—	10	2	10	4	3	1	3	1	1	—	—	—	—	—	6	79
Larkhall, -	145	1	30	—	32	23	15	9	7	6	5	1	—	—	—	—	4	278
Newarthill, -	72	1	17	—	10	11	6	1	5	3	2	—	—	—	—	—	5	131
Newnains, -	104	1	10	2	10	17	10	—	13	5	3	—	—	4	3	—	13	195
New Stevenston, -	95	1	19	1	17	11	2	1	10	4	4	—	1	1	—	—	6	173
Shotts, -	127	6	20	2	23	17	22	2	10	6	4	—	1	3	1	—	14	258
Tannochside, -	46	—	6	—	9	5	4	3	1	4	1	—	—	—	—	—	1	80
Uddingston, -	45	2	10	—	9	10	7	3	—	1	—	—	—	—	—	1	11	99
	1,338	34	330	19	303	203	148	66	184	80	38	7	2	14	8	1	206	2,981

Ante-natal Cases.—During the year, 440 ante-natal cases were seen at the Child Welfare Centres. These are shown in the following table according to Centres and the conditions found:—

TABLE M IX.
ANTE-NATAL CASES.

Centre.	Normal.	Abnormal Presentation.	Contracted Pelvis.	Albuminuria.	Hypertremesis.	Hæmorrhage and Threatened Abortion.	Hydræmnios.	Leucorrhœa.	Varicose Veins and Hemorrhoids.	Respiratory.	Cardiac.	Gastro-Intestinal.	Pyelitis and Cystitis.	Dental Caries.	Other Septic Diseases.	Abdominal Pain.	Previous Abnormality.	Debility.	Others.	Total.
Baillieston,	-	13	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Bellshill, -	-	9	-	2	1	3	-	-	-	-	-	1	-	1	-	-	2	6	-	25
Blantyre, -	-	43	2	16	2	4	2	1	15	7	2	11	1	12	2	10	-	12	2	145
Cadzow, -	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Cambuslang,	-	32	4	11	3	4	-	1	14	8	3	6	-	13	1	6	-	9	4	119
Chapelhall,	-	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3
Larkhall, -	-	34	-	3	-	3	-	-	-	-	-	1	-	-	-	-	-	1	-	42
Newarthill,	-	2	-	2	-	-	-	-	-	-	-	2	-	-	-	-	1	5	-	12
Newmains,	-	22	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	24
New Stevenston,	-	5	-	2	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	9
Shotts, -	-	21	-	1	1	-	-	1	2	2	-	2	-	-	-	-	1	-	-	31
Tannochside,	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2
Uddingston,	-	5	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	3	-	10
	191	6	1	41	7	15	2	3	32	18	5	23	1	28	3	16	5	37	6	440

Of the above cases, 274 were referred for treatment to the ante-natal wards; 51 were referred to the family doctors; and the remaining 115 received treatment at the Clinics.

Post-Natal and Other Consultations.—Table M X shows the post-natal gynæcological and other consultations which were made at the various Centres :—

TABLE M X.
POST-NATAL AND OTHER CONSULTATIONS.

CENTRE.	POST-NATAL.											GYNÆCOLOGICAL.							OTHERS.								
	Uterine Displacement.	Cervical Tear.	Leucorrhœa.	Diseases of the Breast.	Varicose Veins.	Albuminuria.	Gastro-Intestinal.	Respiratory.	Dental.	Anæmia and Debility.	Others.	Total.	Uterine Displacement.	Cervical Tear.	Endometritis.	Disorders of Menstruation.	Ovarian Pain.	Others.	Total.	Respiratory.	Gastro-Intestinal.	Cystitis and Nephritis.	Dental.	Anæmia and Debility.	Others.	Total.	
Baillieston,	-	-	-	-	-	-	-	-	1	6	-	7	1	-	-	-	-	-	-	1	-	1	-	2	4	7	
Bellshill, -	-	-	-	5	-	1	3	2	2	20	3	36	1	-	2	1	-	2	2	6	4	5	1	2	4	7	23
Blantyre,	-	2	4	2	5	1	2	-	-	40	4	60	3	-	8	7	4	4	-	26	4	1	3	25	5	11	49
Cadzow, -	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-	5	7
Cambuslang,	-	1	5	2	1	3	6	-	13	27	-	58	3	1	10	6	3	8	-	31	7	4	34	-	7	22	74
Chapelhall,	-	-	-	-	-	-	-	-	-	7	-	7	-	-	-	1	-	-	-	1	1	-	-	-	-	4	5
Larkhall, -	-	-	-	-	-	-	-	-	-	29	-	29	1	2	-	2	7	-	-	12	-	-	-	11	-	20	31
Newarthill,	-	-	-	-	-	1	-	-	-	9	-	10	1	-	-	-	1	-	2	2	2	2	-	4	-	6	14
Newmains,	-	-	-	-	-	-	-	1	-	12	-	13	2	4	2	4	-	2	14	-	3	-	-	-	-	6	9
New Stevenston,	-	-	-	-	-	-	-	1	-	5	1	7	-	-	1	-	-	-	1	1	-	1	1	-	1	3	6
Shotts, -	-	-	-	-	-	3	-	1	-	18	-	22	2	1	1	-	-	1	5	-	-	-	-	1	-	10	11
Tannochside,	-	-	-	-	-	-	-	-	-	10	1	11	-	-	-	1	-	-	1	1	2	-	-	-	-	3	6
Uddingston,	-	-	-	-	-	-	-	-	-	16	-	16	-	-	-	-	-	-	-	-	2	-	-	1	1	4	8
	3	4	7	12	2	10	9	5	16	200	9	277	14	8	24	22	15	17	100	22	18	39	46	20	105	250	

NECESSITOUS CASES.

The numbers dealt with monthly and the annual figures and estimated expenditure for each Centre are shown in Table M XI below :—

TABLE M XI.

Jan.	Feb.	Mar.	April.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.		
2,178	1,224	1,235	1,054	1,142	1,224	1,270	1,446	1,351	1,367	1,080	779	15,350		
			No. of Cases.	Amount.						No. of Cases.	Amount.			
Airdrie,	...		1,310		£763	4	5	Newarthill,	...	833	£429	8	1	
Baillieston,	...		1,255		640	5	9	New Stevenston,		795	406	9	9	
Bellshill,	...		1,782		816	10	3	Newmains,	...	718	298	0	11	
Blantyre,	...		2,460		1,161	9	11	*Quarter,	...	13	3	16	4	
*Bothwell,	...		75		22	17	0	*Salsburgh,	...	4	1	11	7	
Cadzow,	...		479		250	18	8	Shotts,	...	580	260	10	11	
Cambuslang,	...		698		351	0	6	*Stonehouse,	...	10	2	9	11	
Chapelhall,	...		634		348	14	9	Strathaven,	...	127	60	15	10	
*Glengowan,	...		9		1	7	11½	Tannochside,		725	399	7	10	
*Greengairs,	...		22		3	8	1½	Uddingston,	...	1,696	878	11	8	
*Harthill,	...		7		1	14	7	*Udston,	...	40	13	4	4	
Larkhall,	...		1,078		536	13	1							
			9,809		£4,898	5	0				5,541	£2,754	7	2

TABLE M XII—*Continued.*

DEMONSTRATIONS.			LECTURES.
	Cookery.	Dress-making.	
Cadzow, -	—	—	—
Cambuslang, -	11	18	Influenza. Bathing baby. Small-pox and vaccination. Rickets. The aims and uses of a Child Welfare Centre. Whooping-cough. Measles. Breast feeding and weaning.
Chapelhall, -	7	13	—
Larkhall, -	10	12	Infectious diseases.
Newarthill, -	11	11	—
Newmains, -	11	10	Purposes of Child Welfare Centre. Vaccination. Ante-natal care. Confinement and lying-in period. Impetigo.
New Stevenston, -	11	10	—
Shotts, - -	9	21	Purposes of Infant Welfare Centre. Vaccination. Artificial sunlight. The expectant mother. Common skin diseases in childhood.
Tannochside, -	9	8	—
Uddingston, -	10	10	—
	115	160	

TREATMENT OF SQUINT.

The work in connection with the treatment of squint cases is summarised in the following statement:—

Cases Examined at	First Cases.	Spectacles Prescribed.	Re-examined.
Bellshill, ...	26	25	20
Blantyre, ...	7	6	3
Cambuslang, ...	17	15	3
Hamilton, ...	5	5	2
Shotts, ...	22	21	7
	77	72	35

DENTAL TREATMENT—MOTHERS AND CHILDREN.

During the year 149 mothers and 62 children were recommended for dental treatment, and of these 107 mothers and 46 children attended the dental surgeons appointed by the Local Authority.

Centre.	MOTHERS.		CHILDREN.	
	Recommended for Treatment.	Attended Dentist.	Recommended for Treatment.	Attended Dentist.
Baillieston, ...	1	—	1	1
Bellshill, ...	6	4	2	2
Blantyre, ...	47	25	15	7
Cadzow, ...	3	2	1	1
Cambuslang, ...	64	57	29	26
Chapelhall, ..	3	2	1	—
Larkhall, ...	16	10	6	4
Newarthill, ...	3	1	—	—
Newmains, ...	1	1	—	—
New Stevenston, —	—	—	—	—
Shotts, ...	1	1	3	3
Uddingston, ...	4	4	4	2
	149	107	62	46

BOARDED-OUT CHILDREN.

During the year no additional children were boarded out by the Local Authority. The total number of children boarded out by the Local Authority by the end of the year was 2.

EAR, NOSE, AND THROAT TREATMENT.

The work done at the Ear, Nose, and Throat Clinic held at the County Hospital, Motherwell, is summarised below:—

No. of Sessions.	No. of 1st Visits.	No. of Re-visits.	Operations recommended.	Operations performed.
21	132	123	101*	84

The operations performed were as follows:—

Tonsils and Adenoids, ...	...	...	72
Incision of Membrana Tympani, ...	...	...	5
Antral Puncture, ...	...	...	1
Mastoidectomy, ...	...	...	3
Incision of Mastoid Abscess, ...	...	...	1
Removal of Turbinal, ...	...	...	1
Oesophagoscopic Examination, ...	...	...	1
Total, ...	...	...	84

* This figure includes 11 patients awaiting operation at the end of 1926.

The difference in the number of operations recommended and operations performed is made up as follows:—

Reeommended for operation—received examina- tion only,	2
Operation not required after medicinal treatment,	1
Referred to General Hospital,	1
Resident outwith district,	2
Operation elsewhere,	3
Operation refused,	3
Awaiting operation at the end of the year, ...	5
Total,	<hr/> 17 <hr/>

Two patients had each double operations performed, viz. :—Mastoid and tonsils and adenoids, 2.

Recommendations to attend the Ear, Nose, and Throat Clinic for the first time during the year were received from the following sources :—

Baillieston Child Welfare Centre,	3
Bellshill do.,	17
Blantyre do.,	12
Cadzow do.,	2
Cambuslang do.,	11
Chapelhall do.,	4
Larkhall do.,	10
Newarthill do.,	7
Newmains do.,	11
New Stevenston, do.,	6
Shotts, do.,	1
Tannochside, do.,	4
Uddingston, do.,	9
Larkhall Dispensary,	4
Medical Practitioners,	6
Public Health Staff,	24
Own accord,	1
	<hr/> 132 <hr/>

MISCELLANEOUS CASES.

A boy of 12 years, suffering from post scarlatinal otitis media, was treated by medicinal measures, and a girl of 6 years, who had otitis media and mastoid disease following scarlet fever, had a radical mastoid operation performed.

Three children of school age attended in error. One was referred to the Education Authority, one to a general hospital, and one to own doctor.

County Maternity Hospital, Bellshill.

REPORT BY THE PHYSICIAN-SUPERINTENDENT,
HENRY JAMES THOMSON, M.D.

	Adults.	Babies.
Number of patients remaining in Hospital on 31/12/26, - - - - -	31	24
Number of patients admitted, - - - - -	1,104	715
Number of patients discharged, - - - - -	1,094	688
Leaving in residence, - - - - -	32	20
Number of deaths, - - - - -	9	31

The still-births for the year numbered 63.

TABLE M I.

	In Residence 1/1/27	Admitted.	Discharged.	Died.	In Residence 31/12/27
Ante-natal -	2	142	136	2	6
Confinements,	20	730	722	4	24
Abortions, -	3	124	124	1	2
Post-natal, -	2	45	46	1	—
Gynæcological,	4	59	63	—	—
Others, . -	—	4	3	1	—
	31	1,104	1,094	9	32

Infants born in Hospital.—

In Residence 1/1/27	Infants born. Alive.	Still-born.	Discharged. Well.	Died.	In Residence 31/12/27
23	683	63	659	27	20

Babies admitted with mother.—

In Residence 1/1/27	Admitted.	Discharged. Well.	Died.	In Residence 31/12/27
1	32	29	4	—

TABLE M II.

	Number of Cases discharged.	Condition.				Died.
		Well.	Improved.	I. S. Q.	Worse.	
Ante-natal, -	138	82	6	48	—	2
Confinement, -	726	713	2	—	7	4
Abortion, -	125	121	2	—	1	1
Gynæcological, -	63	50	3	10	—	—
Post-natal, -	47	43	—	1	2	1
Others. -	4	—	1	1	1	1
	1,103	1,009	14	60	11	9

The following table shows the districts from which the patients were admitted :—

TABLE M III.

MIDDLE WARD, 991			
Avondale, 9	Cambusnethan, 40		
East Kilbride, 26	Dalserf, 79		
Glasford, 2	Dalziel, 5		
Stonehouse, 10	Hamilton, 34		
Blantyre, 138	New Monkland, 51		
Bothwell, 384	Old Monkland, 73		
Cambuslang, 104	Shotts, 36		
LOWER WARD, 39	UPPER WARD, 42		
LANARK BURGH, 24	WISHAW BURGH, 2		
AIRDRIE BURGH, 1	BIGGAR, 1		
LANARK POORHOUSE, 3			
Total, 1,103			

TABLE M IV.

ANTE-NATAL CASES.

Reason for admission.—

Asthma, - - - - - 2	Nephritis, - - - - - 1
Accident (1), Fractured ribs (2),	Post-encephalitis lethargica, - 1
Abdominal bruising, - - 2	<i>Toxæmias of Pregnancy—</i>
<i>Cardiac and Circulatory Diseases—</i>	Albuminuria, - - - - 10
Cases showing symptoms of	Cystitis, - - - - 1
cardiac failure, - - 5	Hæmaturia, - - - - 2
Fainting attacks in absence of	Edema (general), - - - 3
symptoms of heart disease, 1	Puerperal eclampsia, - - 2
Phlebitis, - - - - 1	Pyelitis, - - - - 6
False labour, - - - - 35	Pernicious vomiting, - - 29
General debility, - - - - 18	Others, - - - - 5
Hydramnios, - - - - 1	
<i>Hæmorrhages—</i>	
External accidental hæmorrhages (slight), - - 7	
<i>Nervous Diseases—</i>	
Chorea and mental instability, 2	
Epilepsy, - - - - 2	
Hysteria, - - - - 2	

Results.—

Discharged well,	82
Discharged improved,	6
Discharged I.S. Q.,	48
Died,	2
	<hr/>
	138
	<hr/>

TABLE M V.

ABORTIONS AND UTERINE HÆMORRHAGES.

There were 125 cases discharged from hospital which had been admitted as suffering or having suffered from symptoms of uterine hæmorrhage, and on examination the under-noted conditions were found to be present:—

Threatened abortion,	16
Threatened becoming inevitable,	10
Complete abortion,	17
Incomplete abortion,	78
Not pregnant, menorrhagia,	1
Pyosalpinx right tube, extra-uterine pregnancy, left tube,	1
Extra-uterine pregnancy,	2
	<hr/>
	125
	<hr/>

Results.—Of the 26 cases of threatened abortion 16 were discharged well. One was discharged on the day following admission at her own request, the remaining 9 became inevitable, and were curetted.

Of the remaining 99 cases, 17 were complete abortions, while 82 had surgical interference. 2 cases had abdominal section performed on account of extra-uterine pregnancy. 1 was sent to County Hospital, Motherwell, and 1, not pregnant, was curetted. 78 underwent curettage.

Discharged well.	121
Discharged I. S. Q.,	3
Died (see note on Maternal Death),	1
	<hr/>
	125
	<hr/>

TABLE M VI.

ABNORMAL OR COMPLICATED CONFINEMENTS.

Number of cases, 289					
<i>Conditions found.—</i>					
Abnormal presentations, - - -	37	<i>Toxæmias of Pregnancy—</i>			
Adherent membranes and placenta, -	3	Eclampsia, - - - -	-	-	11
Contracted pelvis, - - - -	27	Hæmaturia, - - - -	-	-	1
<i>Hæmorrhages—</i>		Pernicious vomiting, - - -	-	-	3
External accidental hæmorrhage, -	19	Pyelitis, - - - -	-	-	12
Placenta prævia,, - - - -	8	Twin pregnancy, - - - -	-	-	11
Post-partum hæmorrhage, - - -	2	Uterine inertia, - - - -	-	-	5
Hydramnios, - - - -	2	Others, - - - -	-	-	13
Premature births (5 still-born), -	26				
Nervous diseases, - - - -	3				
<i>Toxæmias of Pregnancy—</i>					
Albuminuria, - - - -	77				
Albuminuria with other com- plications, - - - -	29				289

The obstetrical operations necessary in the above series were as follows :—

Manual delivery, - - - -	12	Induction of labour, - - - -	26
Version, - - - -	4	Craniotomy, - - - -	3
Forceps delivery, - - - -	32	Cæsarean section, - - - -	9
			86

Under “ Other Cases of Confinement ” there were an additional 15 cases of forceps delivery.

The results in this group were as follows :—

Discharged well.	276
Discharged improved,	2
Discharged worse,	7
Died,	4
	289

OTHER CASES OF CONFINEMENT.

(a) Number of normal deliveries,	422
(b) Number of cases delivered without medical attendance at delivery	329

(c) Number of instrumental deliveries (exclusive of those appearing under (3)),	15
(d) Number of cases of morbidity (B.M.A. Standard), ...	34
(e) Number of cases under (d) in which delivery was instrumental,	18
(f) Number of deaths (classified).—	—
(1) Acute puerperal sepsis, after shoulder presentation,	1
(2) Metritis and toxæmia of pregnancy,	1
(3) Puerperal eclampsia,	1
(4) Broncho-pneumonia,	1
	—
	4

RECEIPTS FROM PATIENTS.

Receipts from Patients,	£498 13 7½
Pupil-midwives' Premiums,	185 0 0
	£683 13 7½

(a) Number of infants born (i) alive, 686; (ii) still, 63.

(b) Number of cases of twins (i) under (a) (i) above, 18 set; (ii) under (a) (ii) above, 1 set.

Number of deaths of infants under 8 days old, 27.

Number of cases of puerperal sepsis removed from Institution, 8

TABLE M VII.

POST-NATAL CASES.

There were treated in the Institution during the year 47 post-natal cases, and the conditions for which these were admitted were as follows:—

Adherent placenta and membranes, 4	Primary post-partum hæmorrhage, 1
Albuminuria, - - - - 1	Primary post partum hæmorrhage, with cervical laceration, - - 1
Abscess of Bartholin's gland, - 1	Pulmonary tuberculosis, - - 1
Broncho-pneumonia, - - - 1	Secondary post-partum hæmorrhage, 2
Complete perineal laceration, - 2	Sub-involution, - - - - 2
Eclampsia, - - - - 5	
For confinement, but birth before arrival, - - - - 23	47
Mastitis, - - - - 2	

Results.—

Discharged well,	41
Discharged to County Hospital Motherwell (1 puerperal sepsis, 1 mastitis, 1 broncho-pneumonia with effusion),	3
To Blantyre Hospital (mastitis),	1
Died (10 minutes after admission),	1
Discharged I.S.Q. (went home at her own request),	1
	<hr/>
	47
	<hr/>

There were also 4 cases classified under the heading of "Others":—

- (1) Patient admitted with history of hyperemesis gravidarum of seven weeks' duration. On examination the patient was not pregnant. She became progressively worse, and death ensued eight days after admission. Post-mortem examination revealed an adeno-sarcoma of the pancreas.
- (2) Patient suffering from heart disease and nephritis, sent in as a six-month pregnancy. Not pregnant, and was sent home at her own request.
- (3) Patient sent in as a seven-month pregnancy, but the distension of the abdomen was due to ascites. She was removed to the Glasgow Royal Infirmary for treatment.
- (4) Patient sent in for examination on account of pelvic pain. No pelvic disorder present. The patient had slight cough, the sputum was examined and was found to contain tubercle bacilli.

TABLE M VIII.

GYNÆCOLOGICAL CASES.

There were 63 cases discharged from hospital, and these received either medical or surgical treatment.

A detailed statement of all cases is shown below :—

Endometritis—

Menorrhagia, - - - -	13	}	Curettage, - - - -	16
Metrorrhagia, - - - -	5		Medical treatment, - - - -	11
Leucorrhœa, - - - -	5			
Sub-involution, - - - -	4			
Dysmenorrhœa, - - - -	9		Curettage, 7; medical treatment, -	2
Sterility, - - - -	1		Curettage, - - - -	1
Perineal tear (complete), - - - -	5		Perineorrhaphy, - - - -	5
Cervical tear, - - - -	9		Trachelorrhaphy, - - - -	9
Fibroid of uterus, - - - -	2		Hysterectomy, - - - -	1
			Medical treatment, - - - -	1
Dermoid cyst, - - - -	1		Abdominal section and removal, -	1
Cystic ovary, - - - -	3		Oophorectomy, 1; no operation on account of general weakness of patients. Discharged, - - - -	2
Perineal tear and rectal fistula, - - - -	1		Perineorrhaphy and repair, - - - -	1
Rectocele, cystocele, frequency of micturition, obesity, - - - -	1		Examination only, - - - -	1
Cervical polypus, - - - -	2		Excision, - - - -	2
Frequency of micturition, - - - -	1		Medical treatment, - - - -	1
Carcinoma of cervix, - - - -	1		Sent to Cancer Hospital for treatment, - - - -	1
	<hr/> 63			<hr/> 63

MATERNAL DEATHS.

A. = Ante-natal.

K. = Confinement.

Ab. = Abortion.

E. = Post-natal.

O. = Others.

(1) K.114.—Patient admitted at full term in labour suffering from hydramnios, with a transverse presentation necessitating version. The child was still-born, and adherent placenta was removed manually. The patient's condition became worse and died on third morning of acute puerperal sepsis.

Cause of death: *Acute sepsis.*

(2) O.328.—Patient admitted with history of having pernicious vomiting for seven weeks previously. On examination it was found that the patient was not pregnant. The vomiting was intractable, and the patient gradually became worse and died. Post-mortem report was adeno-sarcoma of pancreas.

Cause of death: *Adeno-sarcoma of pancreas.*

(3) A.446.—Patient admitted suffering from eclampsia. Had 12 fits before admission and 41 after admission. Routine treatment carried out. Patient died 10½ hours after admission, undelivered.

Cause of death: *Puerperal eclampsia, exhaustion.*

(4) K.499.—Patient admitted suffering from toxæmia of pregnancy, confined normally. Sickness continued and the patient gradually became worse with elevation of temperature and pulse on seventh day after delivery. Patient died on 12th day of puerperium.

Cause of death: *General toxæmia and metritis.*

(5) Ab.561. — Patient admitted in collapsed condition suffering from incomplete abortion with rapid pulse and subnormal temperature. Patient collapsed from severe hæmorrhage within a few hours of admission.

Cause of death: *Hæmorrhage, shock, exhaustion.*

(6) Ab.932.—Patient admitted suffering from broncho-pneumonia, complicating pregnancy. Examination showed that she was eight months pregnant, delivery was normal, but the placenta was retained, and it was considered unadvisable to remove it on account of the collapsed condition of the patient. Died four hours after.

Cause of death: *Exhaustion following delivery.*

(7) K.1020. — Patient admitted suffering from eclampsia. Had three fits before admission and one on admission. Patient seemed to have recovered from eclampsia, but had another fit 36 hours after, lasting 35 minutes after which the patient collapsed and died. Died fourth day.

Cause of death: *Puerperal eclampsia.*

(8) A.1768.—Patient admitted in sixth month of pregnancy with general œdema (ascites) with cardiac disease, having been confined to bed for six months. Extreme dyspnœa at times. Patient gradually became worse and died. Examination was extremely difficult on account of tenseness of abdomen and it was surmised that the patient was not pregnant. Died five days after admission.

Cause of death: *Cardiac disease. General œdema, exhaustion.*

(9) E.1749.—Patient admitted on account of severe post-partum hæmorrhage due to cervical tear. Patient collapsed in the ambulance and died ten minutes after admission.

Cause of death: *Post-partum hæmorrhage, shock, exhaustion.*

Of the 9 deaths that occurred in the Institution during the year 4 died within 12 hours after admission.

TABLE M IX.

NATURE OF PRESENTATION AND DELIVERY.

Presentation	Delivery					Induction				Total
	Normal	Forceps	Manual	Caes. Section	Craniotomy	Version	Normal	Forceps	Manual	
Vertex.										
L.O.A., -	535	30	...	9	3	4	22	1	...	604
R.O.A., -	59	9	...	...	...	...	1	...	...	69
R.O.P., -	19	3	...	...	...	...	1	...	...	23
L.O.P., -	5	4	...	...	...	...	...	...	...	9
Footling, -	1	...	2	...	...	...	...	...	1	4
Breech, -	28	...	6	...	...	...	...	...	...	34
Shoulder										
Presentation, ...	...	...	1	...	...	...	...	...	...	1
Funis										
Presentation, ...	...	...	3	...	...	...	...	...	...	3
Brow										
Presentation. 1	...	...	...	...	...	1	...	...	...	2
	648	46	12	9	3	5	24	1	1	749

There were 19 pairs of Twins, . - - - - 19

730

Total number of confinements, ... 730

Total number of infants born, ... 749

PERCENTAGE TABLE OF DELIVERY.

	Cases.	Per Cent.
Normal,	648	86·5
Manual,	12	1·6
Version,	5	0·7
Forceps,	46	6·1
Induction,	26	3·5
Caesarean section,	9	1·2
Craniotomy,	3	0·4
	<u>749</u>	<u>100·0</u>

INDUCTION OF LABOUR.

There were 26 cases of induction of labour for the following reasons :—

Albuminuria (persistent),	-	-	9	Uterine inertia (Watson's method	
Pyelitis,	-	-	2	only),	- - - - - 3
Hæmaturia,	-	-	1	Bronchitis and asthma,	- - - 1
Hyperemesis gravidarum and album-				Hyperemesis,	- - - - - 1
inuria,	-	-	1		
For repeated death of child,	-	-	1		
Contracted pelvis,	-	-	7		26

CASES OF CÆSAREAN SECTION.

No.	Age	Reg. No.	Previous Pregnancies	Child Alive or Still-born	Mother Alive or Dead	Remarks
1	24	54	—	A.	A.	For contracted pelvis.
2	26	60	2	A.	A.	Second Cæsarean section for contracted pelvis.
3	24	191	—	A.	A.	Contracted pelvis. Height of patient only 4 feet.
4	37	495	—	A.	A.	For contracted pelvis.
5	25	756	—	A.	A.	Second section after 4 years.
6	39	755	—	A.	A.	For contracted pelvis.
7	17	1054	—	A.	A.	Suffered from ankylosed hip-joint due to tuberculous disease. Well-marked albuminuria. Developed pelvic abscess.
8	36	1551	2	A.	A.	Contracted pelvis.
9	26	1708	1	A.	A.	Contracted pelvis.

CASES OF CRANIOTOMY.

There were three cases in which craniotomy had to be performed for contracted pelvis, where instrumental delivery was attempted before admission. Two made an uneventful recovery, while one was sent to the County Hospital, Motherwell, suffering from puerperal sepsis.

PLACENTA PRÆVIA.

No.	Reg. No.	Age	Gravida	Hæmorrhage Duration or Degree	Child Alive or Still-born	Mother Alive or Dead	Remarks
1	46	37	5	Slight.	A.	A.	—
2	99	40	8	1 day.	S.B.	A.	Version done.
3	455	39	11	3 weeks.	S.B.	A.	Bleeding severe. Version done.
4	503	36	10	Just before admission. Profuse after.	A.	A.	Tamponed. Normal delivery after.
5	546	22	1	Profuse bleeding after admission.	A.	A.	—
6	584	39	11	Slight.	A.	A.	—
7	738	29	3	Severe for 1 day.	S.B.A.		Version to assist delivery, sent to County Fever Hospital Motherwell on account of Puerperal Sepsis.
8	1095	39	5	Bleeding profusely on admission.	S.B.	A.	—
9	1448	34	9	Hæmorrhage slight few days before admission.	A.	A.	—

ACCIDENTAL HÆMORRHAGE.

No.	Age	Reg. No.	Pregnancy Duration	Hæmorrhage Duration or Degree	Delivery	Child Alive or Still-born	Mother Alive or Dead	Pregnancy Number
1	44	116	8 months	Moderate	Rupture of membranes	S.B.	A.	13
2	33	293	Full	„	Normal	A.	A.	6
3	41	326	7 months	Profuse	Normal	S.B.	A.	10
4	39	460	Full	Moderate	Rupture of membranes	S.B.	A.	11
5	28	798	7 months	After admission	Vaginal tampons, afterwards normal delivery	S.B.	A.	1
6	36	907	Full	Several days	Normal	A.	A.	2
7	26	909	8 months	Few hours	„	A.	A.	3
8	29	924	7 „	1 day	„	S.B.	A.	5
9	34	954	Full	After labour commenced	„	A.	A.	7
10	25	971	8 months	Slight	„	A.	A.	1
11	35	1088	Full	Moderate	„	A.	A.	4
12	39	1120	8½ months	Slight	„	A.	A.	7
13	24	1127	7 „	„	„	S.B.	A.	3
14	35	1243	7 „	„	„	A.	A.	8
15	33	1312	Full	Profuse	„	S.B.	A.	8
						Twins		
16	21	1341	8 months	Moderate	„	A.	A.	1
17	35	1481	7 „	Slight	„	A.	A.	4
18	35	1506	8½ „	„	„	A.	A.	7
19	23	1625	8 „	„	„	A.	A.	1

ECLAMPSIA.

Number of cases, 19; deaths, 2; 10·5 per cent.

No.	Reg. No.	Age	Gravida	Maturity	No of Fits	Treatment	Child Alive or Still-born	Mother Alive or Dead	Remarks
1	446	25	1	6 months	53	Routine	S.B. not viable	D.	Died 10½ hrs. after admission
2	1239	24	1	6 "	15	"	"	A.	Aborted
3	197	30	3	Full	6	"	A.	A.	...
4	448	30	1	"	7	"	A.	A.	Twin pregnancy
5	559	34	4	"	2	"	S.B.	A.	...
6	825	26	1	"	1	"	A.	A.	Forceps delivery. Posterior presentation Urine. loaded with albumen
7	864	17	1	7 months	2	"	A.	A.	Difficult forceps delivery. Large foetal head
8	1020	23	2	Full	6	"	A.	D.	Forceps delivery. Patient had 3 fits before admission, 2 fits after admission at long intervals, those lasting 25 and 35 minutes each.
9	1351	20	1	"	5	"	A.	A.	...
10	1354	38	11	7 months	1	"	A.	A.	...
11	1454	33	2	8 "	4	"	A.	A.	Baby died 4 days after.
12	1542	43	15	8 "	1	"	S.B.	A.	Urine loaded with albumen
13	1746	26	2	7 "	6	"	A.	A.	...
				post-natal					
14	65	29	1	Full	4	"	P.	A.	Albumen and blood
15	121	20	1	"	9	"	P.	A.	...
16	518	24	2	"	3	"	P.	A.	...
17	716	17	1	"	9	"	P.	A.	...
18	981	23	1	"	5	"	P.	A.	...
19	1171	26	1	"	6	"	P.	A.	...

ECLAMPSIA.

Maternal mortality for past five years:—

			Died.	% Mortality.
1923,	...	4 cases	2	50%
1924,	...	12 cases	4	33·3%
1925,	...	20 cases	6	30%
1926,	...	27 cases	2	7·4%
1927,	...	19 cases	2	10·5%
82 cases			16	19·5%
Average Mortality rate.				

PUERPERAL SEPSIS.

The cases of puerperal sepsis occurring during the year 1927 in this institution numbered 9.

(1) J.C.—Case of impacted breech. Delivery was very difficult, and patient developed temperature of 103 F. on third day, when she showed other symptoms of puerperal sepsis. Patient was removed to the County Hospital, Motherwell, for treatment.

(2) J.C.—This patient had abdominal section performed to effect delivery of the child. The patient had an ankylosed hip-joint, question if this was due to tuberculosis. She developed a pelvic abscess 14 days after operation, and was removed to the County Hospital, Motherwell.

(3) J.F.—Patient admitted suffering from pernicious anæmia. Patient did not develop elevated temperature until 10 days after confinement. This patient was also removed to the County Hospital, Motherwell.

(4) M'K.—Patient admitted after having had severe bleeding due to central placenta prævia. Child was delivered by version and was still-born. The patient suffered severely from the effects of hæmorrhage, and on second day developed puerperal sepsis.

(5) B.B.—Patient admitted as "failed forceps," the cord was also prolapsed. Craniotomy was done to effect delivery and the patient developed puerperal sepsis, and was removed for treatment to the County Hospital, Motherwell.

(6) L.—Patient admitted with bronchitis and asthma with cardiac failure. Induction of labour performed. The actual delivery was normal but the patient developed puerperal sepsis.

(7) W.—Patient suffered from toxæmia of pregnancy and general debility, was delivered normally. Elevation of temperature on second day and appeared very ill. Was removed to the County Hospital, Motherwell.

(8) M'G.—Case of ante-partum hæmorrhage, external accidental with albuminuria. Induction of labour was performed and a macerated child was born, the discharge at the time of delivery being exceedingly offensive. The patient developed puerperal sepsis and was removed to the County Hospital, Motherwell.

(9) D.—Patient admitted suffering from hydramnios, albuminuria, and the general condition of the patient was poor. A transverse presentation was dealt with by version and a still-born child was delivered. The patient died within 36 hours from acute sepsis.

TABLE SHOWING PREGNANCIES AT VARIOUS AGE PERIODS.

	-20	-25	-30	-35	-40	-45	45 and over	Total.
Gravida								
1	66	126	42	15	7	2	...	258
2	11	65	42	11	8	...	..	137
3	...	24	30	15	3	...	...	72
4	...	6	26	20	4	...	...	56
5	...	4	15	12	8	...	...	39
6	...	...	9	16	6	1	...	32
7	...	3	5	16	8	...	1	33
8	...	...	1	15	12	2	...	30
9	...	...	...	8	10	5	...	23
10	...	...	1	...	9	7	...	17
11	...	...	...	2	5	4	...	11
12	...	...	...	2	4	5	...	11
13	...	...	...	...	1	3	1	5
14	...	...	...	...	...	...	...	...
15	...	...	...	...	...	4	1	5
16	...	...	...	...	...	...	1	...
	77	228	171	132	85	33	4	730

CAUSATION OF STILL-BIRTHS.

The number of still-births for the year is 63, and the causes are as follows:—

<i>Causes in the mother affecting still-birth —</i>		(a) Haematocele obstructing labour, causing delay in delivery, -	1
(a) Toxæmias of pregnancy.		Delayed labour, - - -	1
Albuminuria, - - - -	5	No known cause. Normal delivery, - - - -	3
Hæmaturia, - - - -	1	<i>Causes affecting child.</i>	
Eclampsia, - - - -	2	(a) Monsters.	
Pyelitis, - - - -	1	Hydrocephalus, - - - -	1
Hydramnios, - - - -	1	Meningocele, - - - -	1
(b) Ante-partum hæmorrhage.		Anencephalus, - - - -	3
Ante-partum hæmorrhage, -	18	(b) Other conditions.	
Ante-partum hæmorrhage and impacted after-coming head, -	1	Impacted shoulders causing delay in delivery, - - -	1
Ante-partum hæmorrhage and prolapsed cord, - - - -	1	Impacted head after breech presentation, - - - -	3
(c) Contracted pelvis, forceps delivery, - - - -	1	Prolapsed cord in contracted pelvis, - - - -	1
Contracted pelvis, craniotomy (destructive operation), -	4	Unusually large head presenting, - - - -	2
Contracted pelvis, failed forceps delivery before admission		Macerated foetus, - - - -	8
Delivery effected after admission with forceps, - - -	3		—
			63

Sex.	Babies born alive.		Babies still-born.	
	Legitimate.	Illegitimate.	Legitimate.	Illegitimate.
Males, -	278	66	27	5
Females, -	275	67	29	2
	686		63	

The following shows the number of infants born since the Local Authority began the treatment of maternity cases, 1918 to 1927 :—

	In residence.	Infants Born alive.	Still-born.	Discharged well.	Died.	In residence.
1918, -	—	7	—	5	—	2
1919, -	2	30	2	22	5	5
1920, -	5	110	6	105	6	4
1921, -	4	203	22	183	15	9
1922, -	9	213	50	201	11	10
1923, -	10	288	57	273	20	5
1924, -	5	334	61	303	23	13
1925, -	13	501	56	458	28	28
1926, -	28	643	64	605	43	23
1927, -	23	683	63	659	27	20

INFANTILE DEATHS.

31 infants died in the Institution during the year.

27 were children who were born in hospital.

4 were children admitted with mother during the puerperium.

Causes of death were as follows :—

Premature births, - - - -	15
Premature twin births, - - - -	5
Premature birth and placenta prævia, - - - -	1
Congenital debility, - - - -	4
Asphyxia pallida, - - - -	1
Injury at birth, - - - -	4
General toxæmia after same condition in mother, - - - -	1
	<hr/> 31 <hr/>

Specimens examined at the County Laboratory during the year under review number 517.

There were 47 swabs taken from cases of ophthalmia neonatorum and the results of examination for gonococci were as follows, Positive. Negative.
 — 47

Placental blood specimens for Wasserman reaction—

Number of specimens of blood examined, 445,
 the results were as follows, 3 442

Urine specimens numbered 22. The results were as follows:—Albumen, 4; pus, 12; blood, 2; normal, 4.

Other three specimens were sent for examination—

- (1) Swabs of throat for diphtheria—negative.
- (2) Fluid from lung—streptococci present.
- (3) Tumour of the pancreas—adeno-sarcoma present.

TRAINING OF PUPIL-MIDWIVES.

The following are the regulations at present in force regarding applicants desirous of midwifery training.

In respect of the training afforded, all nurses who are on the General or Supplementary Register, and living outside the Local Authority's area shall pay a premium of £30. For those living in the Local Authority's area the premium will be £20, whether they are on the said register or not. Nurses who receive their training in any of the County institutions will obtain their training as a midwife free of charge, except as after mentioned, but such nurses shall not be entitled to such free training unless they have completed three years' training as a nurse. When a nurse has left any of the County institutions she will not be entitled to free training as a nurse. Of the amounts mentioned, £1 must accompany the application for engagement, and the balance will be payable when training is commenced. Nurses who are trained in the Local Authority's institutions must likewise make a deposit of £1 at the time of application for engagement. Such deposit shall not be repayable except, in the opinion of the Physician-Superintendent, special circumstances warrant repayment. Where an applicant has received previous training, one reference must be from the Matron under whom she last worked.

Applicants who are not certified nurses must have a good general education. Applicants who do not held a certificate in English satisfactory to the Physician-Superintendent must pass a test in English (including dictation), and also, if required, in arithmetic and general knowledge.

During the year under review 12 pupils were admitted for training, bringing the total number of pupils trained, since the time when the Institution was recognised as a Training School, up to 113. 10 entered for the Central Midwives' Board examination, and 9 obtained the C.M.B. certificate.

REPORT ON THE TRAINING OF PUPIL-MIDWIVES FROM THE COMMENCEMENT
1921, UNTIL 31ST DECEMBER, 1927.

The training of pupil-midwives commenced in the County Maternity Hospital, Bellshill, about the middle of November, 1921. Since that date to 31st December, 1927, 113 nurses have been admitted for training.

During the years 1921-22, 10 of 13 nurses admitted for training received free training, the remaining three paid £20 each. During the year 1922 the number of applicants for training became so numerous that the Hospital Committee decided that in future a fee would be charged in respect of training, with this exception, that those who were or had been in the employment of the District Committee would still receive free training. The regulations for admission of candidates for training were redrafted so as to provide that a nominal fee of £1 (to be sent along with application) would be charged for midwifery training for nurses who had applied before the completion of their three years' period of training in an institution belonging to the District Committee.

The advent of the new regulations taking effect from May 1st, 1926, quite altered the aspect of the future with regard to securing a sufficiency of pupils for carrying on the work of the Institution.

Although the County Maternity Hospital did not suffer to any great extent, yet, on the other hand, the number of applications was considerably depleted. Many of the larger institutions in Scotland failed to obtain a sufficiency of pupil-nurses who had registrable qualifications in nursing. However, after 20 months of the extended period of training, it is gratifying to find that applications are coming forward in greater numbers again, and at the present time, January, 1928, this Institution has all vacancies booked up until the end of October, 1928.

I have shown below a detailed statement of the number of nurses who have been admitted for training, and of these (*a*) the number who had free training, (*b*) the number who paid a deposit fee of £1, (*c*) the number who have paid fees.

		Nurses admitted.	Free training.	Deposit only.	Fee paying.	Total Fee.
1921-22,	...	13	10	—	3	£60
1923,	...	17	7	—	10	144
1924,	...	21	1	5	15	199
1925,	...	26	1	6	19	373
1926,	...	26	—	2	24	500
1927,	...	*12	—	4	8	185
		115	19	17	79	£1,461

* The reduction in numbers for the year 1927 was due to the extended period of training.

It must also be taken into account that not only are the funds of the Institution benefiting by the premiums, but also that the nurses render free service during their period of training.

Results analysed

Number of nurses who entered for and passed the examination of the Central Midwives Board,	...	...	...	...	91
Number of nurses who failed to pass the examination of the Central Midwives Board,	...	...	...	...	3
Number of nurses who have not had the opportunity of entering for the examination of the Central Midwives Board,	...	...	...	...	14
Number of nurses who were disqualified from continuing training, viz.,	...	...	...	...	5
(a) Incompetence,	...	...	1		
(b) Through accident,	...	...	1		
(c) Not desirous of continuing training,	...	...	3		

113

STAFF.

The Staff consists of the following:—

Physician-Superintendent.	4 Staff Nurses
Consulting Surgeon.	1 Typist.
Anæsthetist.	9 Maids.
Matron.	1 Chauffeur.
3 Sisters.	4 Stoker-gardeners.

In addition to the permanent staff, there are 12 nurses who are taking the qualifying course in midwifery.

OUT-PATIENT TREATMENT.

During the year a number of cases suffering from abnormal conditions affecting pregnancy and from post-natal conditions received advice at the clinic. Such cases are usually sent to the hospital by medical practitioners.

The clinic is held three times a week for women suffering from abnormal conditions of pregnancy, and from conditions which may be the result of difficult labour, such as tears of the cervix, fistula, cystocele, ruptured perineum, and menorrhagia.

OUT-PATIENT DEPARTMENT.—ANTE-NATAL CASES.

Parishes	Normal	Contracted Pelvis	Toxæmia of Pregnancy	Ante-partum Hemorrhage	Abortions	Pyelitis	Hydræmios	Pseudocyesis	Repeated Death of Child	Tuberculosis	Heart Disease	Others
Avondale, - - - -	18	1	1	...	...	...	...	...	...	...	...	...
East Kilbride, - - -	4	1	...	...	...	...	...	...	...	...	...	1
Glasford, - - - -	1	...	...	...	...	...	...	...	...	...	...	...
Stonehouse, - - - -	3	...	...	1	...	...	...	...	...	...	...	...
Blantyre, - - - -	27	...	...	1	...	...	...	...	...	...	...	1
Bothwell, - - - -	72	7	2	3	5	1	1	1	2	...	...	2
Cambuslang, - - - -	27	...	2	...	...	...	...	...	...	...	...	1
Cambusnethan, - - -	6	2	...	1	...	...	...	...	...	...	...	1
Dalserf, - - - -	1	...	...	...	...	...	...	...	...	...	...	...
Dalziel, - - - -	...	...	...	...	...	...	...	...	...	...	...	...
Hamilton, - - - -	5	1	...	...	...	...	...	...	...	...	...	...
New Monkland, - - -	37	4	1	1	...	...	...	...	1	...	...	1
Old Monkland, - - -	20	2	...	1	...	...	...	...	...	...	...	...
Shotts, - - - -	2	...	2	...	...	...	...	...	...	...	...	...
Lower Ward, - - - -	10	...	...	...	...	...	...	...	...	1	...	...
Upper Ward, - - - -	8	1	2	...	...	...	...	...	...	...	1	1
Total, - - - -	241	19	10	8	5	1	1	1	3	1	1	8

Others—

Chorea,	1
Bronchitis and Asthma,	2
Anæmia,	1
Cervicitis,	1
Leucorrhœa,	2
Ventral hernia,	1
	<hr/>
	8
	<hr/>

GYNÆCOLOGICAL CASES.

	Endometritis	Dysmenorrhœa	Amenorrhœa, with Anæmia	Cervical Laceration	Perineal Laceration	Prolapsus Uteri	Cystocele	Uterine Displacements	Cystic Ovary	Incontinence of Urine	Uterine Fibroid	Lumbar Pain	Carcinoma of Cervix	General Debility	Pelvic Inflammation	Others	Total
Avondale, -	6	2	...	6	1	3	...	3	...	4	2	1	1	...	1	..	30
East Kilbride, -	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Glasford, -	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2
Stonehouse, -	3	...	1	2	...	...	...	1	...	...	...	...	1	...	...	...	8
Blantyre, -	6	...	...	11	1	3	1	...	...	1	...	2	...	...	...	1	26
Bothwell, -	31	3	2	10	2	2	4	3	1	1	1	2	...	7	2	5	76
Cambuslang, -	10	3	...	3	2	...	...	...	1	1	...	2	...	1	2	1	26
Cambusnethan, -	9	4	...	3	1	...	1	1	2	...	...	2	...	...	...	...	23
Dalserf, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dalziel, -	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Hamilton, -	4	...	1	2	...	...	...	1	...	...	...	...	...	...	...	...	8
New Monkland, -	11	...	...	5	1	2	2	2	...	...	...	...	...	2	...	2	27
Old Monkland, -	4	...	1	1	1	...	...	2	...	...	...	...	...	2	2	...	13
Shotts, -	2	...	...	4	...	1	...	...	1	...	...	...	...	...	...	...	8
Lower Ward, -	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	4
Upper Ward, -	2	...	...	2	...	1	...	1	...	...	...	1	...	...	...	1	8
	91	14	5	49	9	14	8	14	5	8	3	10	3	12	7	10	262

Others No. 9 were as follows:—

Immature pelvic organs, ...	1	Bladder fistula, ...	...	...	1
Cervical polypus, ...	1	Prolapsed ovary, ...	...	...	1
Deficiency ductless glands, ...	3	Appendicitis, ...	...	...	1
Inguinal hernia, ...	1				

Total, ... 9

County Convalescent Home, Calderbank House.

Physician-Superintendent—THOMAS D. HUNTER, M.A., M.D.

Matron—Miss C. M. JOHNSTONE.

BUILDINGS AND GROUNDS.—During the year the patients' dining-room was converted into a children's ward, and one of the adult wards changed into a nurses' dormitory. The room previously used for this purpose is now the patients' dining-room; by this change the adult bed accommodation was reduced by 4 beds and 17 children's cots were added.

ACCOMMODATION.—The institution has now 14 adult beds, 36 cots, and 18 treasure cots—full accommodation, 68 patients.

STAFF.—The nursing staff consists of matron, 1 sister, 2 staff nurses, and 8 probationers—2 extra probationers being engaged on account of the increase in patients' accommodation. The domestic staff consists of 1 cook, 1 kitchen maid, 1 table maid, 2 laundry maids, 2 ward maids, and 1 house sewing maid. The outdoor staff comprises 1 gardener, 1 assistant gardener, and 1 apprentice.

PATIENTS TREATED.—On 1st January, 1927, 12 mothers and 28 children were resident in the Home.

TABLE I.—Shows the admissions for the year:—

Mothers,	.	-	-	-	-	-	224
Children under 1 year,	-	.	-	-	-	-	105
Children over 1 year,	-	-	-	-	-	-	207
In addition 2 babies were born in the Home,	-						2
							538

230 mothers and 295 children were discharged, and 6 children died, making the total discharges 531. On 31st December, 1927, 7 mothers and 40 children were in residence. Of the cases admitted, 504 were resident in the Middle Ward, 9 in the Upper Ward, and 25 in the Lower Ward.

TABLE II.—Shows the place of residence of the Middle Ward cases arranged according to parish:—

Stonehouse,	-	-	-	7	Hamilton,	-	-	-	15
Blantyre,	-	-	-	114	New Monkland,	-	-	-	21
Bothwell,	-	-	-	199	Old Monkland,	-	-	-	18
Cambuslang,	-	-	-	73	Shotts,	-	-	-	12
Dalserf,	-	-	-	45					
									504

TABLE III.—Indicates Child Welfare Centres and Institutions from which admissions were arranged :—

Baillieston, - - - -	13	Uddingston, - - - -	35
Bellshill, - - - -	64	Tannochside, - - - -	9
Blantyre, - - - -	96	Motherwell Ear, Nose, and Throat Clinic, - - - -	49
Cadzow, - - - -	1	Bellshill Hospital, - - - -	67
Cambuslang, - - - -	55	Motherwell Hospital, - - - -	2
Chapelhall, - - - -	20	Longriggend Sanatorium, - - - -	2
Larkhall, - - - -	40	Shotts Sanatorium, - - - -	1
Newarthill, - - - -	16	In addition admitted from :—	
New Stevenston, - - - -	19	Lower Ward, - - - -	17
Newmains, - - - -	10	Upper Ward, - - - -	9
Shotts, - - - -	11	Born in House, - - - -	2
		Total, - - - -	<u>538</u>

TABLE IV.—Reasons for admission :—

MOTHERS—		CHILDREN—	
Post-natal Debility, - - -	119	Admitted with Mother, - - -	99
Ante-natal Debility, - - -	89	Debility, - - - -	67
Post-operative Debility, - - -	7	Rickets, - - - -	44
Albuminuria, - - - -	3	Eczema, - - - -	1
Tonsils, - - - -	4	Enteritis, - - - -	1
Nose, - - - -	1	Ear, Nose, and Throat, - - -	94
Antrum, - - - -	1	Impetigo, - - - -	2
		Tape Worm, - - - -	1
		Blepharitis, - - - -	1
		Marasmus, - - - -	2
		Born in House, - - - -	2
	<u>224</u>		<u>314</u>
TOTAL, - - -		538	

DURATION OF RESIDENCE.—Of the patients discharged the average duration of residence was 18 days for mothers and 31 days for children.

ULTRA-VIOLET RADIATION. — During the year 85 patients in hospital received artificial sunlight treatment—73 patients were discharged—12 were still receiving treatment on 1st January, 1928.

The conditions treated and results were as follows:—

Condition.	No.	Results.				Continuing Treatment.	Stopped Treatment on own Responsibility.
		Cured.	Im-proved.	I.S.Q.	Worse.		
Debility, - - -	50	19	18	6	1	6	6
Rickets, - - -	29	2	18	2	1	6	2
Skin, - - -	4	1	3	—	—	—	—
Ear, Nose and Throat,	2	—	2	—	—	—	—

The number of applications of ultra-violet radiation for indoor patients was 2,034.

OUT-DOOR PATIENTS.—27 out-door patients received treatment. On 1st January, 1928, 7 of those patients were still attending for treatment.

Condition.	No.	Results.				Continuing Treatment.	Stopped Treatment on own Responsibility.
		Cured.	Im-proved.	I..SQ.	Worse.		
Debility, - - -	11	2	3	3	—	3	3
Rickets, - - -	12	—	4	6	—	2	6
Tuberculous Gland of Neck (adults). -	3	—	1	1	—	1	1
Skin, - - -	1	—	—	—	—	1	—
Parkinsonian, - -	1	—	—	1	—	—	1

Number of applications of ultra-violet radiation for out-door patients was 266.

DISEASES OF EAR, NOSE, AND THROAT.—The following operations were performed during the year 1927:—

Tonsils and Adenoids, - - - - -	67
Nose, - - - - -	5
Mastoid, - - - - -	4
Adenoids, - - - - -	16
Tonsils (adults), - - - - -	5
Nose (adults), - - - - -	1
Antrum (adult), - - - - -	1

In addition one out-door case attended twice for oesophagoscopic examination, and one patient had the tip of the uvula removed. One case had incision of membrana tympani.

INFECTIOUS DISEASE. — On October, 5th, 1927, 3 children were transferred to the County Hospital, Motherwell, suffering from Vincent's angina; on 10th October, 1 case; on 12th October, 2 cases; on 13th October, 1 case; and on 29th October, 4 cases.

RESULTS OF TREATMENT. — The results of treatment were satisfactory, the majority of cases being well or much improved on discharge. Six children died, the cause of death being as follows:—

Tuberculous, Meningitis, -	-	-	-	-	1
Marasmus, -	-	-	-	-	3
Congenital Debility, -	-	-	-	-	2
					<hr/>
					6
					<hr/>

County Hospital, Blantyre.

Physician-Superintendent—WILLIAM GLASGOW, M.B., Ch.B.

Sister-in-Charge—Miss LEE.

ACCOMMODATION.—The accommodation for patients is 11 cots and 7 beds.

STAFF.—The staff consists of charge sister, 2 staff nurses, 3 probationer nurses, 3 maids, and 1 part-time gardener.

CASES TREATED.—15 cases were under treatment on 1st January, 1927, and during the year 131 cases were admitted, 133 were discharged, and 6 died, leaving 7 cases under treatment at the end of the year.

PLACE OF RESIDENCE.—Of the 131 cases admitted, 126 resided in the Middle Ward, 3 in the Upper Ward, and 2 in the Burgh of Lanark. The parishes of residence of patients admitted from the Middle Ward were :—

Avondale, -	1	Cambuslang, -	9	Holytown, -	20
Bellshill, -	22	Cambusnethan, -	5	Larkhall, -	15
Blantyre, -	28	Dalserf, -	4	New Monkland, -	1
Bothwell, -	8	East Kilbride, -	1	Old Monkland, -	5
Calderhead, -	2	Hamilton, -	1	Shotts, -	3
				Stonehouse, -	1

AGES OF PATIENTS.—The ages of patients under treatment were as follows :—

CHILDREN :—

Months.		Years.		Total.
-6	6-12	1-2	2-5	
30	17	8	6	61

OTHERS :—

Years.					Over	Total.
-20	-25	-30	-35	-40	40	
8	12	20	13	11	6	70

NATURE OF ADMISSION. — The conditions which necessitated admission were:—

CHILDREN:—

Mother in hospital, - - -	17	Marasmus, - - -	14
Malnutrition, - - -	19	Enteritis, - - -	7
Rickets, - - -	1	Bronchitis, - - -	1
Pneumonia, - - -	1	Impetigo, - - -	1
			<hr/>
			61

OTHERS:—

Post-natal—

Debility, - - -	12
Abortion, - - -	3
Mastitis, - - -	9
Albuminuria, - - -	5
Phlebitis, - - -	1
Pelvic Cellulitis, - - -	1
Hemiplegia, - - -	1
Complete Perineal Tear, -	1

Ante-natal—

Debility, - - -	10
Albuminuria, - - -	7
Acute Bronchitis, - - -	1
Tape Worm, - - -	1
Pyelitis, - - -	1
Vaginitis, - - -	1
Encephalitis Lethargica (Parkinsonian), - - -	1

Gynæcological—

Ovaritis, - - -	1
Dysmenorrhœa, - - -	1
Prolapsus uteri, - - -	1
Polypus—Cervix Uteri, -	1

Others—

Monoplegia, - - -	1
Post-operative Debility, -	1
Ex-Ophthalmic Goitre, - -	1
Duodenal Ulcer, - - -	1
Pulm. T.B., - - -	1
Pyelo-Nephritis, - - -	1
Nephritis, - - -	1
Rheumatoid Arthritis, - -	2
Encephalitis Lethargica (Parkinsonian), - - -	2

RESULT OF TREATMENT. — 97 cases were discharged well, 11 improved, 9 I.S.Q. 14 were transferred to Bellshill Hospital, 1 to Motherwell Hospital, and 1 to Longriggend Sanatorium, and 6 children died.

The causes of death recorded were as follows:—

Marasmus, - - -	4
Congenital Debility, - - -	1
Pyelo-Nephritis, - - -	1

COUNTY OF LANARK.
DISTRICT OF THE MIDDLE WARD.

MIDWIVES (SCOTLAND) ACT, 1915.

Eleventh Annual Report by the Medical Officer
of Health, 1927.

STAFF.

Administrative Officer.

J. HUME PATTERSON, F.R.F.P.S.(G.), D.P.H.

Executive Officers and Inspectors of Midwives.

J. M'CALLUM LANG, M.D., D.P.H.

THOMAS D. HUNTER, M.A., M.D.

DAVID R. HAMILTON, M.A., M.B., Ch.B., D.P.H.

EDGAR A. UNDERWOOD, M.A., B.Sc., M.B., Ch.B., D.P.H.

WILLIAM GLASGOW, M.B., Ch.B.

Nurse Health Visitors and Assistant Inspectors of Midwives.

(All hold the C.M.B. Certificate.)

HELENA STRATH.

JEAN F. ROSS.

MARGARET STEWART.

MARGARET ARNOT.

CATHERINE ROBERTSON.

JEAN BAIRD.

ANNIE HARDIE.

HELEN C. KEEGANS.

MARGARET MACAULAY.

KATE SANDERSON.

KATHERINE CURRAN.

ELIZ. C. M'DONALD.

JEAN HANLEY.

MARY MACDONALD.

FLORA MACKENZIE.

MARGARET M. SWAN.

MARGARET M'CALLUM.

Practising Midwives.—During the year 207 certified midwives (157 resident within and 50 resident outwith the Middle Ward) notified their intention to practise—a decrease of 10 compared with the number for last year.

The qualifications of the practising midwives are as follows:—

	1922	1923	1924	1925	1926	1927
Certificate of the Central Midwives Board (Scotland),	49	50	54	53	53	54
Certificate of the Central Midwives Board (England),	2	2	2	3	4	4
Trained and certified by the Royal Maternity Hospital (Glasgow),	9	7	6	6	6	6
Trained and certified by the Royal Maternity Hospital (Edinburgh),	1	1	1	1	1	1
In <i>bona fide</i> practice and certified under the Act,	174	171	167	159	153	142
	<u>235</u>	<u>231</u>	<u>230</u>	<u>222</u>	<u>217</u>	<u>207</u>

The above table shows that there are now 65 trained midwives, and 142 uncertificated midwives, as compared with 64 and 153 respectively in 1926.

Change of Address.—The changes of address of 19 midwives were reported to the Board; 5 left the District, 2 of the latter going abroad.

Deaths.—3 midwives died during the year, the numbers on the roll being 34; 1,586; 1,808.

Inspection of Midwives.—The routine inspection of midwives resident in the District numbered 668. In addition, 275 special inspections were made on account of non-compliance with the rules, while a few were made for tuitional purposes. A number of midwives were specially interviewed at the local Child Welfare Centre by the Medical Officers of the Districts. In connection with the possession of midwifery outfits, 4 midwives were without bags and linings; 2 did not possess washable uniforms and aprons; 2 were without nail brushes; 1 without scissors; and 13 had not supplied themselves with thermometers. The reports of the Inspectors showed that registers in 4 instances and temperature charts in 28 instances were either kept incorrectly or no attempt was made to keep them at all.

Disciplinary Cases.—No cases were reported to the Central Midwives Board for disciplinary action, but three midwives were interviewed by the Medical Officer of Health for failure to comply with the regulations. 24 letters were issued to midwives on account of minor offences.

Attendance at Confinement.—There were notified during the year the births of 5,513 living children, and, in addition, 201 notifications of still-births were received. Of the total, according to the information given on the notification forms, 1,651 were attended by doctors; 1,049 by doctors and midwives; 2,936 by certified midwives; and 50 by handywomen. During the previous year handywomen were in attendance at 34 of the births. 28 infants were born before the arrival of an attendant.

The amount of work undertaken by individual midwives was found to vary very considerably. For example, in each of three instances the midwife attended over 100 confinements, the actual numbers attended being 108, 109, and 147. Two of the midwives referred to hold the C.M.B. Certificate, while the other is untrained.

The following table gives, according to parish, the number of midwives practising within the Middle Ward, the births notified, and the person in attendance at the confinement:—

TABLE I.—SHOWING THE NUMBER OF MIDWIVES, BIRTHS NOTIFIED, AND THE ATTENDANCE AT CONFINEMENT AS INDICATED IN THE NOTIFICATION FORM.

PARISH.	ATTENDANT AT CONFINEMENT.							
	Number	Births	Doctor.	Doctor	Midwife.	Handy- woman.	B.B.A.	
	of Midwives.	Noti- fied.		and Midwife.				
Avondale, ...	3	88	50	19	19	—	—	
East Kilbride, ...	—	98	67	11	19	1	—	
Glasford, ...	2	28	9	10	9	—	—	
Stonehouse, ...	5	89	34	9	45	—	1	
Blantyre, ...	10	522	29	90	400	—	3	
Bothwell, ...	46	1,643	182	473	973	3	10	
Cambuslang, ...	14	594	228	35	321	3	7	
Cambusnethan, ...	16	511	356	77	66	10	2	
Dalserf, ...	23	485	81	114	281	9	1	
Dalziel, ...	—	28	14	6	8	—	—	
Hamilton, ...	4	198	36	18	140	2	1	
New Monkland, ...	13	393	49	69	269	2	2	
Old Monkland, ...	14	483	140	59	262	17	1	
Shotts, ...	7	554	375	57	119	3	—	
Midwives resident outwith District, ...	50	—	—	—	—	—	—	
Total, ..	207	5,714	1,650	1,047	2,931	50	28	

Notifications were also received in respect of 295 infants born in institutions in the Middle Ward, but whose parents belong to areas outwith the District.

Infantile Deaths.—The total number of deaths of infants under the age of 1 year was 493, and of this number 163 occurred within 10 days of birth. The attendant at birth in the latter cases was as follows:—Certified midwife, 36; doctor and midwife, 46; medical practitioner alone or with handywoman, 44; handywoman, 6; institutions, 28; and B.B.A., 3.

The causes of death in the 163 cases referred to were as follows:—Premature births, 97; debility, 25; congenital malformation, 9; congenital heart, 5; injury at birth, 4; atelectasis, 9; convulsions, 5; pneumonia, 2; other respiratory, 1; cerebral hæmorrhage, 2; congenital hydrocephalus, 1; diarrhœa, 1; other ailments, 2.

**Still-Births.*—201 still-births were notified during the year, and special inquiries were made into 198 of these. A medical practitioner was in attendance in 42 cases, a midwife alone in 32, and a doctor and midwife together in 71. 50 of the still-births occurred in institutions, 2 were B.B.A., and in 1 case the attendant was a handywoman.

**Puerperal Septicæmia* (including all notifications of puerperal fever).—82 cases were brought to the notice of the Department, an increase of 27 on last year's figures. The confinement was conducted by a medical practitioner in 13 instances, by a doctor and midwife in 26, by a midwife alone in 23, and by a handywoman in 1. 4 confinements took place before the arrival of an attendant. 3 cases occurred following abortion, and 12 cases were reported from institutions. 20 deaths occurred, the attendant at confinement being as follows:—Midwife, 2; doctor and midwife, 8; doctor alone or with neighbour, 1; institutions, 8; in 1 instance (abortion) no attendant was present.

**Ophthalmia Neonatorum and Discharging Eyes.*—The total number of notified cases of ophthalmia neonatorum was 98. 52 (53 per cent.) were notified by medical practitioners; 14 (14·2 per cent.) by certified midwives; 9 (9·1 per cent.) by both doctors and midwives; 22 by institutions; and 1 was notified by another Local Authority. The persons in attendance at birth in the above cases were as follows:—Doctors, 31; doctors and midwives, 17; midwives, 24. Three confinements took place before the arrival of an attendant, and 22 occurred in institutions. In one case a neighbour was the attendant.

* These conditions are more fully dealt with in the Child Welfare Section of the Annual Report.

The number of cases of discharging eyes reported was 83, the attendants at birth being as follows: — Doctors, 14; doctors and midwives, 4; midwives alone, 22; and handywomen, 2. In 40 cases the births took place in institutions, and in one instance the baby was born before the arrival of an attendant.

**Examination of Urine.*—20 certified midwives sent to the County Laboratory 175 specimens of urine for examination, 71 giving a positive result. In addition, 18 specimens (6 positive) were submitted by members of the Public Health Staff. At the Child Welfare Centres the staffs examined 510 specimens of urine, 101 of these proving positive.

Medical Assistance.—Medical aid was sought by midwives in 504 instances, a decrease of 116 compared with last year. The conditions for which assistance was obtained are detailed in Table II.

Payment of Doctors' Claims. — The claims sent in by medical practitioners under Section 22 of the Act numbered 391, and amounted to £501 15s. 9d., as compared with 255 for the previous year, amounting to £379 3s. 3d.

Provision of Certified Midwives in Necessitous Cases.—The cost of the attendance of a certified midwife was met by the Local Authority in 7 cases, the fee paid being 25s. per case.

Compensatory Fees.—In 28 instances where a midwife called a medical practitioner to her assistance, the patient was removed to hospital, and in each case a compensatory fee of 10s. was paid to the midwife.

Liability to be a Source of Infection.—24 notifications were received from midwives as follows:—Scarlet fever 3; ophthalmia neonatorum, 1; puerperal fever, 17; diphtheria, 1; enteric fever, 1; and pneumonia, 1.

Form of Having Laid out a Dead Body. — 7 notifications were received, 3 being for mothers, and 4 for infants.

Notification of Death.—1 notification of the death of an infant was received.

Intention to Practise.—A list of the midwives who notified their intention to practise during the year was forwarded to the Board on 9th February, 1928.

* These conditions are more fully dealt with in the Child Welfare Section of the Annual Report.

TABLE II.—SHOWING THE RECORDS OF SENDING FOR MEDICAL ASSISTANCE, CLASSIFIED ACCORDING TO PARISH AND THE CONDITIONS REQUIRING MEDICAL AID. THE TOTALS ARE ALSO SHOWN FOR EACH YEAR SINCE 1923.

REASONS FOR MEDICAL ASSISTANCE.	Parish.										Total during					
	Avondale.	Blantyre.	Bothwell.	Cambuslang.	Cambusnethan.	Dalserf.	Dalziel.	Hamilton.	New Monkland.	Old Monkland.	Shotts.	1927	1926	1925	1924	1923
MOTHER—																
Delayed labour } (unqualified), }	1	45	42	9	1	25	—	7	12	5	—	147	173	135	142	85
Contracted } Pelvis, }	—	—	3	—	—	—	—	—	1	—	—	4	12	3	6	8
Uterine Inertia, }	—	1	26	—	1	1	—	—	1	4	—	34	58	29	13	14
Abnormal Pre- } sentation, }	1	3	14	5	—	3	—	—	4	1	3	34	57	48	36	28
Placenta Prævia, }	—	—	—	—	—	—	—	—	—	—	—	—	4	3	1	—
Ante-partum } Hæmorrhage, }	—	6	6	1	—	—	—	1	2	1	1	18	25	15	14	12
Post-partum } Hæmorrhage, }	—	5	2	3	—	—	—	—	2	—	—	12	7	7	7	6
Retained } Placenta, }	—	1	10	—	—	1	—	—	—	1	—	13	20	19	24	12
Hydramnios, }	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
Eclampsia, }	—	5	—	—	—	—	—	—	—	—	—	5	5	3	2	2
Albuminuria, }	—	5	1	10	—	—	—	—	—	—	—	16	17	16	18	—
Torn Perineum, }	—	28	22	8	—	—	2	3	4	6	—	73	81	68	51	47
Abortion (actual } or threatened), }	—	7	1	—	—	—	—	—	—	—	—	8	12	5	7	8
Prolapse Uterus, }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Pyrexia, }	—	6	5	7	—	—	—	—	—	2	—	20	9	8	18	14
Puerperal Sepsis, }	—	—	—	—	—	—	—	—	—	1	—	1	1	—	1	3
Phlebitis, ... }	—	2	—	1	—	—	—	—	—	—	—	3	—	—	1	3
Influenza, ... }	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—
Debility and Ex- } treme Weakness, }	—	8	—	—	—	3	—	—	4	—	—	15	12	1	6	3
Varicose Veins, }	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
Other defined } causes, }	—	6	5	5	—	1	—	1	2	1	—	21	21	36	27	17
Undefined causes, }	—	6	2	3	—	1	—	—	3	—	—	15	17	—	—	—
CHILD—																
Still Birth, ... }	—	2	5	2	—	1	—	2	2	—	—	14	17	17	15	20
Premature Child, }	—	6	5	3	—	2	—	1	—	—	—	17	20	23	23	13
Ophthalmia } Neonatorum, }	—	2	7	2	—	—	—	—	—	—	—	11	23	33	26	11
Discharging Eyes, }	—	—	1	1	—	—	—	—	—	—	—	2	—	—	—	—
Congenital } Malformation, }	—	1	—	1	—	—	—	—	—	—	—	2	3	3	3	3
Anencephalus, }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Spina Bifida, }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Hare Lip, }	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Convulsions, }	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—
Debility and Ex- } treme Weakness }	—	1	1	1	—	—	—	—	1	1	2	7	4	4	—	—
Hydrocephalus, }	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—
Fracture of Arm, }	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Prolapse Cord, }	—	—	2	—	—	—	—	—	—	—	—	2	4	—	3	—
Skin Condition, }	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Other causes, }	—	4	4	1	—	—	—	—	—	—	—	9	14	9	13	3
	2	150	165	63	2	38	2	15	38	23	6	504	620	492	465	313

III.—GENERAL SANITATION.

In the Report of the District Sanitary Inspector, which is incorporated, will be found an account of the work done under the headings, "Houses let in Lodgings," "Tents, Vans, and Sheds," "Workshops," "Scavenging," "Private Streets," "Nuisances," "Interments," &c.

HOUSING.

Post-War Housing Scheme.—The following tabular statement shows the progress made in connection with the erection of State-aided houses during the years 1921 to 1927, inclusive:—

Year.	Houses occupied.	Houses Ready for occupation.	Houses in progress.	Total.
1921, ...	253	85	2,300	2,638
1922, ...	1,344	152	1,822	3,318
1923, ...	3,054	65	297	3,416
1924, ...	3,365	1	168	3,534
1925, ...	162	32	606	800
1926, ...	397	123	1,588	2,108
1927, ...	1,707	147	1,354	3,208

The position of the post-war housing scheme at the close of the year is shown in detail in the following statistical information, supplied by Mr. P. C. Smith, the Committee's Housing and Town Planning Engineer:—

Progress Report for Period ended 31st December, 1927.

SUBSIDY SCHEME.

Scheme	Houses occupied	Houses ready for occupation	Houses in progress	Painting	Joiners finishing	Plastered or ready for Plaster	Slated or ready for Slates	Ready for roof	Main joist level	Sleeper joist level	Foundations
Schemes completed, -	534	—	—	—	—	—	—	—	—	—	—
Polytown, - -	76	12	42	42	—	—	—	—	—	—	—
Wingshill, - -	66	14	2	2	—	—	—	—	—	—	—
Bothwell, - -	98	—	4	—	4	—	—	—	—	—	—
Burgeddie, No. 2, -	28	—	12	12	—	—	—	—	—	—	—
Arm Road, - -	28	20	34	22	12	—	—	—	—	—	—
Onehouse, - -	22	—	20	8	12	—	—	—	—	—	—
Rathaven, - -	12	8	30	18	12	—	—	—	—	—	—
Leikle Earnock, -	34	—	—	—	—	—	—	—	—	—	—
Bringinghill, - -	60	36	16	16	—	—	—	—	—	—	—
Armyle, - -	28	14	18	18	—	—	—	—	—	—	—
Wosshill, - -	16	8	12	12	—	—	—	—	—	—	—
Wilderbank, - -	26	4	—	—	—	—	—	—	—	—	—
Wapelhall, - -	20	—	—	—	—	—	—	—	—	—	—
Wibiston, - -	46	4	30	22	8	—	—	—	—	—	—
Wroomhouse, No. 2, -	12	—	22	22	—	—	—	—	—	—	—
Wusby, - -	32	—	—	—	—	—	—	—	—	—	—
Carry forward,	1,138	120	242	194	48	—	—	—	—	—	—

SUBSIDY SCHEME—continued.

Scheme	Houses occupied	Houses ready for occupation	Houses in progress	Painting	Joiners finishing	Plastered or ready for plaster	Slated or ready for slater	Ready for roof	Main joist level	Sleeper joist level
<i>Brought forward,</i>	1,138	120	242	194	48	—	—	—	—	—
Glenmavis, - -	—	—	56	8	40	8	—	—	—	—
Glenburn, - -	20	4	12	12	—	—	—	—	—	—
Caldercruix, No. 2, -	12	—	38	8	26	4	—	—	—	—
Auchinraith Road, No. 1, - -	—	—	12	12	—	—	—	—	—	—
Muiredge, - -	—	—	84	16	24	20	24	—	—	—
Hareleeshill, No. 3, -	—	—	48	—	16	24	8	—	—	—
Waterloo, No. 2, -	—	—	48	12	12	24	—	—	—	—
Newarthill, High Street, -	—	—	24	8	—	10	6	—	—	—
Muirhead, - -	—	—	48	—	—	16	12	2	8	2
Overton Road, - -	—	—	56	—	—	12	12	8	4	12
Waterloo, No. 3, -	—	—	16	—	—	—	16	—	—	—
East Kilbride, - -	—	—	28	—	—	—	—	—	8	20
Fallside, - -	—	—	44	—	—	—	—	—	10	14
Glenboig, - -	—	—	10	—	—	—	—	—	—	—
Totals, - -	1,170	124	766	270	166	118	78	10	30	48

Report for Period ended 31st December, 1927.

SLUM CLEARANCE SCHEME.

Schemes completed, Holytown, - -	264	—	—	—	—	—	—	—	—	—
Nos. 1 and 3, - -	40	—	24	24	—	—	—	—	—	—
Viewfield, - -	64	—	28	28	—	—	—	—	—	—
Hareleeshill, No. 2, -	40	—	—	—	—	—	—	—	—	—
Auchinraith Road, No. 1, - -	50	6	—	—	—	—	—	—	—	—
Crosshill, No. 1, - -	18	—	32	2	16	14	—	—	—	—
Orbiston, No. 1, - -	58	16	—	—	—	—	—	—	—	—
Do. No. 2, - -	—	—	102	—	—	70	32	—	—	—
Overton Road (D.D.), Auchinraith Road, No. 2, - -	3	1	96	64	12	20	—	—	—	—
Ashgillhead, No. 3, -	—	—	80	—	—	42	16	4	—	14
Strutherhill, - -	—	—	40	—	—	20	8	4	8	—
Carmyle (Station), -	—	—	110	—	—	—	16	12	4	24
Crosshill, No. 2, - -	—	—	38	—	—	—	—	6	12	4
Totals, - -	537	23	588	118	28	166	72	26	32	72

Further information with regard to housing is given in detail in the Report of the District Sanitary Inspector.

DAIRIES.

There were three additional producers' licences granted during the year under the Milk (Special Designations) Order (Scotland) 1923, making a total of 15, details of which are shown in the following tabular statement :—

Name of Licensee.	Location of Premises.	Nature of Licence.	Daily yield of milk at last Inspection.	Disposal.
Lord Hamilton of Dalzell,	Dalzell Home Farm, Motherwell,	Certified	82 galls.	11 gallons wholesale to Glasgow Dairy Company. 22 gallons retailed in Motherwell, Hamilton, and Bothwell. 49 gallons for other purposes.
Andrew Wood,	Nerston Farm, East Kilbride,	Grade "A" 73	,,	70 gallons wholesale to Hagborth Dairy, Glasgow. 3 gallons for other purposes.
Middle Ward District Committee,	Hairmyres Colony East Kilbride,	Certified	76	,, All used for Institutional purposes.
Mrs. James Murray,	Stramolloch Farm, Chapelton,	Grade "A" 38 (T.T.)	,,	20 gallons retailed in Strathaven. 13 gallons wholesale to the County Orthopædic Hospital, Stonehouse. 5 gallons for other purposes.
Eben More & Co.,	Dalmacoulter Farm, by Airdrie,	Certified	45	,, 30 gallons retailed in Airdrie and Coatbridge. 15 gallons wholesale to Longriggend Sanatorium.
Thomas Lambie,	Drumbuie Farm, East Kilbride,	Certified	66	,, 54 gallons as Grade A (T.T.). 12 gallons as certified to the East Kilbride Dairy Farmers' Co.
William Fleming,	Auldton Farm, Ashgill,	Certified	65	,, 30 gallons retailed in Dalserf and Larkhall. 25 gallons wholesale to Motherwell and Dalserf Hospitals. 10 gallons for other purposes.
John Strachan,	Udstonhead Farm, Ashgill,	Grade "A" 73 (T.T.)	,,	All wholesale to Motherwell, Bellshill, Lightburn, and Calderbank Hospitals.
Andrew Gilchrist,	Brae Farm, Strathaven,	Grade "A" 27 (T.T.)	,,	All wholesale to East Kilbride Dairy Farmers' Company.
John Fleming,	Bruntdland Dairy, Waterloo,	Grade "A" 55	,,	All retailed in Wishaw.
Scottish Co-operative Wholesale Society,	Allers Farm, East Kilbride,	Certified	16	,, 15 gallons wholesale to East Kilbride Creamery as ordinary milk. 1 gallon for other purposes.
Scottish Co-operative Wholesale Society,	Ryelands Creamery, East Kilbride,	Pasteurised.		
James Wilson,	Westburn Farm, Cambuslang,	Certified	24	,, 19 gallons wholesale to Rosebank Dairy, Cambuslang. 5 gallons for other purposes.
John Hamilton,	Low Mains, East Kilbride,	Certified	50	,, All wholesale as Grade "A" to Ideal Dairies, Glasgow.
Alexander Wilson,	South Carnduff, Strathaven,	Grade "A" 42 (T.T.)	,,	40 gallons wholesale to East Kilbride Dairy Farmers' Company. 2 gallons for other purposes.

DRAINAGE AND SEWAGE DISPOSAL.

The work done in this connection is dealt with in the Report of the Sanitary Inspector, and in the Rivers Pollution and Prevention Section of the County Report.

WATER SUPPLY.

A note of the samples of water taken during the year for analysis, together with the subsequent results and improvements, will be found in detail in the Report of the District Sanitary Inspector.

STAFFING ARRANGEMENTS.

There was one alteration in the Medical Staff during the year, namely, the appointment of Dr. E. A. Underwood to the vacancy incurred by the resignation of Dr. Mary Steven.

REPORT BY THE BUILDINGS INSPECTOR.

Building Regulations.

The plans submitted during the course of the year amounted to 153. A large number of these had not been prepared according to the By-laws, and it was only after considerable correspondence and numerous meetings that matters were rectified. All disconformities were reported to and dealt with by the Committee. Three sets of plans were withdrawn.

During the course of construction of the buildings, 2,325 inspections were made, resulting in the detection of a number of contraventions, which were reported to and dealt with by the Committee.

1,562 smoke tests were made of the drains and plumber work of new properties. Special attention was given to this work, to see that all tests and inspections were carried out without delay, so as to ensure the utmost progress in the erection of the buildings.

In addition to the plans lodged under the Building By-laws, 53 plans were received and approval granted for various erections of a minor character.

NEW BUILDINGS UNDER BY-LAW No. 41.—Houses and shops, 68; workshops, 15; public buildings, 21; and other buildings, 2; total plans, 106.

ALTERATIONS IN THE MODE OF OCCUPANCY, UNDER BY-LAW No. 51.—Houses and shops, 28; workshops, 8; public buildings, 10; and other buildings, 1; total plans, 47.

HOUSING, &C., ACT, 1923.—27 applications, comprising 336 houses, were dealt with. A number of the plans and specifications required adjustment, but all were made to conform to the Regulations issued by the Scottish Board of Health. One plan, comprising one house, was withdrawn. Operations were commenced during the year in 19 cases. A large number of houses have been completed, and Certificate B, for grant earned, has been issued to 23 owners, in respect of 51 houses.

Private individuals continue to take advantage of the benefits under this scheme, and very little trouble is experienced with departures from the approved plans and specifications.

HOUSING (FINANCIAL PROVISIONS) ACT, 1924.—LOCAL AUTHORITY'S SCHEMES.—1,106 houses were reported completed, 942 of which were inspected, and Certificate B granted.

HOUSING (FINANCIAL PROVISIONS) ACT, 1924.—PRIVATE ENTERPRISE.—24 houses under this scheme are in course of erection and nearing completion. No new applications received during the year.

HOUSING (SCOTLAND) ACT, 1925.—12 applications (embodying 342 houses of two apartments), under Section 111 of the above Act, were received for the erection and conversion of existing dwellings into two-apartment houses (see Table II.).

The plans for these were in all cases reported to the Public Health and Housing Committees.

TABLE I.—NUMBER OF SETS OF PLANS LODGED DURING THE YEAR 1927,
IN ACCORDANCE WITH BY-LAWS 41 AND 51, CLASSIFIED ACCORDING
TO THE NATURE OF THE BUILDINGS SET FORTH IN PLANS.

PARISH.	Plans lodged for New Buildings under By-Law 41.				Plans lodged for alterations in mode of occupancy of Existing Buildings under By-Law 51.			
	Houses and Shops.	Work- shops.	Public Buildings.	Others.	Houses and Shops. *	Work- shops.	Public Build- ings.	Others.
Avondale, - -	4	1	...	...	...	...	1	...
East Kilbride, -	15	1	...	...	3	1	...	...
Glasford, - -	...	...	...	...	...	...	...	...
Stonehouse, - -	3	...	...	...	...	...	...	...
Blantyre, - -	1	...	3	...	3	...	...	...
Bothwell, - -	8	2	4	1	3	3	1	...
Cambuslang, - -	9	...	1	1	4	...	1	...
Cambusnethan, -	12	2	3	...	5	...	1	1
Dalserf, - -	4	2	1	...	3	1	2	...
Dalziel, - -	...	1	1	...	...	2	1	...
Hamilton, - -	1	...	1	...	1	...	...	...
New Monkland, -	2	4	2	...	1	...	1	...
Old Monkland, -	6	2	3	...	2	1	...	...
Shotts, - - -	3	...	2	...	3	...	2	...
MIDDLE WARD, -	68	15	21	2	28	8	10	1
TOTAL FOR 1926, -	79	14	21	...	34	7	7	...

* In this column are included plans for additions to existing dwelling-houses. In this way 29 apartments were added to 20 houses.

TABLE II.—SHOWING NUMBER OF HOUSES AND SHOPS SET FORTH IN
PLANS SUBMITTED UNDER BY-LAWS REGULATING THE BUILDING
OR RE-BUILDING OF HOUSES OR BUILDINGS DURING 1927.

PARISH.	NEW BUILDINGS OF						TOTAL.
	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and upwards	Shops.	
Avondale, - -	8	5	...	1	14
East Kilbride, -	33	4	7	1	45
Glasford, - -
Stonehouse, -	2	2	...	...	4
Blantyre, - -	...	48	53	1	...	...	102
Bothwell, - -	...	124	314	...	...	2	440
Cambuslang, -	201	26	9	1	237
Cambusnethan, -	...	34	35	1	...	5	75
Dalserf, - -	...	72	78	1	...	1	152
Dalziel, - -	1	...	...	...	1
Hamilton, - -	1	1
New Monkland,	2	2	...	...	4
Old Monkland, -	...	64	175	99	48	2	388
Shotts, - -	51	...	...	1	52
MIDDLE WARD,	...	342	953	141	64	15	1,515
TOTAL FOR 1926.	...	462	1,310	143	9	17	1,941

Meat Inspection—Slaughterhouses, &c.

ALEXANDER CAMERON, M.R.San.I.

As General Superintendent of Abattoirs and District Meat Inspector, I have to submit the following report:—

It will be observed from Table I that the total number of animals slaughtered at the various abattoirs was 20,559, out of which 6,015 animals were found to contain disease in some form.

Of the 6,015, there were 1,321 carcasses totally or partially condemned, and 4,694 carcasses found with local conditions in which organs only were condemned, these combined being 29·25 per cent. of the total animals slaughtered, as compared with 28·22 per cent. the previous year.

Of the 9,639 cattle slaughtered at the various abattoirs, 173 were sent in by the County Veterinary Inspector under the Tuberculosis Order, and of these 151 were totally or partially condemned, and the remainder passed, being cases in which organs only were condemned.

Tables II and III show in detail, for each slaughterhouse, the class of animals slaughtered, and the extent to which disease was prevalent, both in abattoirs and private slaughterhouses throughout the district.

Table IV shows the number of organs and the diseases for which they were condemned in those cases where organs only were condemned, in abattoirs and private slaughterhouses.

TABLE I.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.											
		Tuberculosis.						Other Diseases.					
		Carcasses.				Organs only.		Carcasses.				Organs only.	
Wholly.		Partially.		Wholly.				Partially.					
Class.	Num- ber.	No.	%.	No.	%.	No.	%.	No.	%.	No.	%.	No.	%.
Cows, -	5,868	352	5·99	739	12·59	2,411	41·08	45	·76	33	·56	912	15·54
Heifers, -	1,892	11	·57	40	2·11	283	14·95	2	·10	2	·10	134	7·08
Bulls, -	242	2	·82	5	2·06	30	12·39	1	·41	1	·41	21	8·67
Bullocks.	1,637	2	·12	14	·85	113	6·96	—	—	1	·06	182	11·11
Calves, -	1,949	18	·92	—	—	—	—	22	1·12	—	—	—	—
Sheep, -	7,755	—	—	—	—	—	—	20	·25	1	·01	553	7·13
Swine, -	1,216	—	—	—	—	43	3·53	9	·74	1	·08	12	·98
Total, -	20,559	385	8·42	798	17·61	2,880	78·91	99	3·38	39	1·22	1,814	50·51

Bellshill.—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	2,442	207	315	887	24	17	518
Heifers, -	442	2	18	55	1	1	35
Bulls, -	103	1	3	13	1	1	3
Bullocks, -	419	1	6	16	—	—	50
Calves, -	33	1	—	—	2	—	—
Sheep, -	1,988	—	—	—	4	—	191
Swine, -	345	—	—	3	3	—	—
Total, -	5,772	212	342	974	35	19	797

Bellshill.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Heifers.	Bulls.	Calves.	Sheep.	Swine.	Total.
Abscess, - - -	4	—	—	—	—	—	4
Asphyxia,	—	—	—	—	2	—	2
Dropsy, - - -	8	—	—	—	—	—	8
Emaciation, - -	1	—	—	—	—	—	1
Gastro-Enteritis, -	2	—	—	—	—	1	3
Injury, - - -	6	1	—	—	1	—	8
Jhones' Disease, -	1	—	—	—	—	—	1
Malignant Neoplasms,	2	—	1	—	—	—	3
Navell Ill., - -	—	—	—	2	—	—	2
Osteomyelitis, - -	1	—	—	—	1	—	2
Pericarditis, - -	7	—	1	—	—	—	8
Pneumonia, - - -	—	1	—	—	—	—	1
Pyæmia, - - -	2	—	—	—	—	—	2
Septicæmia, - - -	4	—	—	—	—	—	4
Septic Mastitis, -	1	—	—	—	—	—	1
Septic Metritis, -	1	—	—	—	—	—	1
Sepsis, - - -	1	—	—	—	—	—	1
Swine Fever, - -	—	—	—	—	—	2	2
	41	2	2	2	4	3	54

Blantyre.—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	1,018	40	207	356	9	11	96
Heifers, -	352	5	3	91	1	—	28
Bulls, -	45	—	1	2	—	—	5
Bullocks, -	255	1	1	8	—	—	21
Calves, -	542	3	—	—	5	—	—
Sheep, -	1,723	—	—	—	7	—	242
Swine, -	278	—	—	5	5	—	4
Total, -	4,213	49	212	462	27	11	396

Blantyre.—TABLE III.—OTHER DISEASES FOR WHICH ANIMALS WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Heifers.	Calves.	Sheep.	Swine.	Total.
Emaciation, - - -	5	—	—	4	3	12
Injury, - - - -	4	—	—	—	—	4
Jhones' Disease, -	2	1	—	—	—	3
Jaundice, - - - -	1	—	—	—	—	1
Pericarditis, - - -	1	—	—	—	—	1
Peritonitis, - - -	2	—	—	1	—	3
Pleuritis, - - - -	2	—	2	1	—	5
Pneumonia, - - - -	—	—	1	1	—	2
Pyæmia - - - - -	1	—	1	—	—	2
Septicæmia, - - -	1	—	—	—	—	1
Septic Mastitis, -	1	—	—	—	—	1
Swine Fever, - - -	—	—	—	—	2	2
	20	1	4	7	5	37

Larkhall.—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	1,238	40	183	648	7	3	116
Heifers, -	298	1	8	46	—	—	20
Bulls, -	24	—	—	4	—	—	7
Bullocks, -	360	—	3	40	—	1	40
Calves, -	135	2	—	—	8	—	—
Sheep, -	761	—	—	—	7	1	60
Swine, -	144	—	—	15	1	1	8
Total, -	2,960	43	194	753	23	6	251

Larkhall. — TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Bullocks.	Calves.	Sheep.	Swine.	Total.
Emaciation, - - -	2	—	—	5	—	7
Gastritis, - - -	—	—	3	—	1	4
Immaturity, - - -	—	—	1	—	—	1
Injury, - - -	2	1	1	1	1	6
Navell Ill, - - -	—	—	2	—	—	2
Pleuritis, - - -	1	—	—	—	—	1
Pneumonia, - - -	—	—	—	2	—	2
Pyæmia, - - -	—	—	1	—	—	1
Septicæmia, - - -	1	—	—	—	—	1
Septic Mastitis, - - -	2	—	—	—	—	2
Septic Metritis, - - -	1	—	—	—	—	1
Septic Pericarditis, -	1	—	—	—	—	1
	10	1	8	8	2	29

Strathaven.—TABLE II. — ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	771	37	15	414	5	1	73
Heifers, -	231	2	3	54	—	1	7
Bulls, -	41	1	1	8	—	—	3
Bullocks, -	6	—	—	—	—	—	2
Calves, -	701	4	—	—	5	—	—
Sheep, -	1,407	—	—	—	1	—	13
Swine, -	360	—	—	20	—	—	—
Total, -	3,517	44	19	496	11	2	98

Strathaven.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Heifers.	Calves.	Sheep.	Total.
Badly Bled, - -	—	—	2	—	2
Braxy, - - -	—	—	—	1	1
Emaciation, - -	—	1	1	—	2
Gastritis, - - -	—	—	1	—	1
Injury, - - -	1	—	—	—	1
Peritonitis, - -	2	—	—	—	2
Pneumonia, - -	1	—	—	—	1
Premature, - - -	—	—	1	—	1
Septic Metritis, -	2	—	—	—	2
	6	1	5	1	13

Shotts.—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	9	6	—	—	—	—	—
Heifers, -	67	—	—	4	—	—	—
Bulls, -	1	—	—	—	—	—	—
Bullocks, -	500	—	1	41	—	—	45
Calves, -	35	—	—	—	—	—	—
Sheep, -	133	—	—	—	—	—	—
Swine, -	5	—	—	—	—	—	—
Total, -	750	6	1	45	—	—	45

Baillieston.—TABLE II.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	189	16	15	66	—	—	39
Heifers, -	358	1	8	30	—	—	29
Bulls, -	13	—	—	3	—	—	1
Bullocks, -	86	—	3	8	—	—	23
Calves, -	473	9	—	—	2	—	—
Sheep, -	1,488	—	—	—	1	—	47
Swine, -	38	—	—	—	—	—	—
Horses, -	—	—	—	—	—	—	—
Total, -	2,645	26	26	107	3	—	139

Baillieston.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

Disease.	Calves.	Sheep.	Total.
Emaciation, - - -	—	1	1
Gastritis, - - -	1	—	1
Navel Ill., - - -	1	—	1
	2	1	3

Stonehouse. — TABLE II. — ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs Only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	181	6	4	40	—	1	70
Heifers, -	144	—	—	3	—	—	15
Bulls, -	15	—	—	—	—	—	2
Bullocks, -	11	—	—	—	—	—	1
Calves, -	30	—	—	—	—	—	—
Sheep, -	255	—	—	—	—	—	—
Swine, -	46	—	—	—	—	—	—
Total, -	682	6	4	43	—	1	88

One cow was partially condemned on account of injury.

Private Slaughterhouses.

TABLE II.

District.		Cattle.	Animals Slaughtered.			Swine.
			Calves.	Sheep.		
Greengairs, - -		116	—	28		29
Longriggend, - -		136	—	99		20
Chapelhall, - -		109	6	81		28
Glengowan, - -		217	—	206		1
Newarthill, - -		49	3	34		19
Cleland, - -		285	5	176		5
Harthill, - -		283	—	123		41
Total, - -		1,195	14	747		143

TABLE III.—ANIMALS CONDEMNED—WHOLLY OR PARTIALLY.

Animals Slaughtered.	Tuberculosis.			Other Diseases.		
	Wholly.	Partially.	Organs.	Wholly.	Partially.	Organs.
Cows, - -	1	13	78	—	—	7
Heifers, - -	—	17	34	—	—	2
Bulls, - -	—	—	1	—	—	2
Bullocks, - -	—	—	2	—	—	7
Calves, - -	—	—	—	—	—	—
Sheep, - -	—	—	—	—	—	1
Swine, - -	—	—	—	—	—	—
Total, -	1	30	115	—	—	19

TABLE IV.—RETURN OF DISEASES FOR WHICH ORGANS WERE CONDEMNED.
DISEASES.

Organs condemned.	Tuberculosis.	Abscess.	Actinomycosis	Pericarditis	Pleurisy.	Pneumonia.	Cirrhosis.	Distomatosis.	Mammitis.	Neoplasms.	Bacterial Necrosis.	Angioma.	Jones' Dis.	Oestrus Larvæ.	Strongylus	Microtus.	Traumatism.	Strongy	Paradoxia.	Nephritis.	Larvæ.	Cysts.				Total.
																						Echino- coccus.	Cenurus	Cerebralis.	Cysticercus	Tenuicollis
Diaphragm, -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	40
Udders, - 1,057	1	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,110
Udders, - 399	—	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	449
Udders, - 2,795	5	—	—	—	—	9	—	—	—	—	—	—	—	3	1	—	2	—	—	—	—	5	—	—	—	2,820
Udders, - 2	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Udders, - 387	274	1	—	—	—	—	534	623	—	—	37	59	2	—	—	—	—	—	—	—	—	15	—	52	—	1,984
Udders, - 92	450	8	—	—	—	—	1	—	1	—	—	—	13	—	—	1	—	—	—	—	—	—	—	2	—	568
Udders, - 1,351	82	—	—	—	—	—	—	—	—	—	—	—	61	—	—	—	—	—	—	—	—	—	—	—	—	1,494
Udders, - 84	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	90
Udders, - 52	6	—	—	—	—	—	—	—	711	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	769
Udders, - 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Udders, -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total, -	6,224	820	111	1	—	9	535	623	712	—	37	59	76	3	1	1	2	4	40	20	—	54	—	54	—	9,332

Note.—This Table does not include the Viscera of Carcasses wholly or partially condemned.

DISEASED UDDERS.—It will be observed that the total number of cows slaughtered was 5,868. Of these, 352 were totally condemned on account of generalised tuberculosis, 89 of which showed evidence of tubercle in the udder. There were 739 cows partially condemned on account of various forms of localised tuberculosis, and of these 30 had udders affected. In addition to the foregoing, there were 2,411 cows in which the disease was so localised that organs only were condemned, and in 52 of these the udder was affected. Of the total

cows slaughtered, 712 cases of indurated udder or other forms of chronic mammitis were found. Many of these cases might be called doubtful tubercle in the absence of microscopic examination.

Of the 1,892 heifers slaughtered, 11 were totally condemned, and 40 partially condemned. In 5 of the cases totally condemned the disease was present in the udder.

Of the total number of tubercular udders, only in a few cases could one venture to look upon the udder lesions as primary, in that it is uncommon in my experience to find tubercle of the udder and no lesions elsewhere.

In dealing with emergency cases, all animals are prohibited from entering public abattoirs or private slaughterhouses unless accompanied by a veterinary certificate certifying that the animal is not suffering from a contagious disease, as scheduled under the Contagious Diseases (Animals) Act, except in the cases of accident or consequent upon calving.

The number of diseased animals found at the different abattoirs varied according to the class or quality of animals slaughtered, *e.g.*, at Bellshill, Blantyre, and to a slight extent at Larkhall, there is a turnover of plain cattle for boning purposes. Disease fluctuates according to quality of these animals.

BUILDINGS.—The accommodation in the seven abattoirs remains the same as last year, and is more than sufficient for the work done.

A certain amount of painter work within the abattoirs required to be done, but, as in previous years, this had the attention of the abattoir staff during the quiet period, *viz.*, the months of June and July. At several of the abattoirs fencing repairs, &c., were carried out.

PRIVATE SLAUGHTERHOUSES.—Ten licences were granted for the slaughter of cattle, sheep, and pigs, and one licence where sheep only were slaughtered, and the arrangement for the inspection of meat still continues as previously reported, these private slaughterhouses being organised under the latest meat regulations. The work of inspection has gone smoothly, and the trade has in no way been hampered.

Vans from adjacent counties continue to hawk the district, and a large number of inspections have been made. The position is steadily improving, however, since the inauguration of the Public Health (Meat Inspection) Regulations (Scotland), 1924.

These inspections are carried out in conjunction with the usual supervision of the public abattoirs and private slaughterhouses, including the inspection of shops. The complete supervision of the district has considerably increased the travelling expenses of the Meat Inspector. This expenditure, however, has been to some extent met by the butchers owning the private slaughterhouses. They unanimously agreed to contribute an amount per head of animals slaughtered, similar to that paid by the butchers who slaughter in the public abattoir. The amount paid by these butchers for the year 1927 amounted to £107. This amount has been sufficient to cover the expense of carrying out inspections at the private slaughterhouses, and, at the same time, provided the necessary facility to inspect in those areas vans, shops, &c.

By-laws for the private slaughterhouses have been prepared, so far as the Public Health Department is concerned, and it is hoped that these will be submitted to the Local Authority and the Scottish Board of Health at an early date, in order that the approval of the latter body may be obtained, and so put the inspection of the private slaughterhouses on a still more satisfactory basis.

The visits to private slaughterhouses and other places, outside abattoirs, were as follows:—

Private slaughterhouses, - - - -	1,040
Butchers' shops, vans, &c., - - - -	3,207

PUBLIC HEALTH (MEAT INSPECTION) REGULATIONS (SCOTLAND), 1924,
ARTICLE 12.—No permits for meat stores were dealt with during the year.

COLD STORES.—In connection with the registration of cold stores, &c., as required by Article 13 of the Public Health (Meat) Regulations (Scotland), 1924, no further steps have been taken in the matter by the Local Authority. These places are, however, being attended to, as previously, under the Public Health Act.

UN SOUND MEAT.—At abattoirs and private slaughterhouses all condemnations have been carried out with owners' consent. The total weight of meat condemned outside of abattoirs (including private slaughterhouses, fleshers' shops, and at farms where special licences for slaughtering were authorised) amounted to 4,395 lbs.

In addition to the above, 47 pigs were slaughtered at a farm at the request of the owner on account of an outbreak of swine fever. Of this number, 21 were totally condemned and 5 partially condemned.

16 pigs were condemned on account of swine fever, 1 condemned because of its being affected with tuberculosis, and 4 condemned owing to poorness of condition. The condemned carcasses and all viscera were removed to a knackery in accordance with the requirements of the Veterinary Inspector under the Contagious Diseases Animals Act.

All condemned meat and residue from the offal business—which is in the hands of the Local Authority—throughout the district is treated in the digester at Bellshill, producing two products, viz., technical tallow and residue for manure. A quantity of the condemned meat and organs is sold to a knackery in the district, as also is the residue from the Bellshill digester.

Periodic visits were made to the Middle Ward Hospitals, and advice given regarding the butcher-meat supplies. Assistance was also given in supervising the piggeries at Motherwell and Bellshill Hospitals, and in most cases the fattened pigs were turned into bacon for the use of the various Middle Ward Institutions.

Report of the Sanitary Inspector.

HOUSING.

The administrative procedure during the year 1927, which was summarised in the information supplied to the Scottish Board of Health, in terms of their Regulations under the Housing Acts, is given in the following tabular statement and subsequent paragraphs:—

Number of dwellings inspected,	988
Number of houses found unfit for human habitation, ...	188
Representations to Local Authority,	100
Closing Orders made,	100
Number of dwellings dealt with by Closing Orders, ...	760
Defects remedied without making Closing Orders, ...	—
Work completed,	66
Work in progress,	30
Work in negotiation,	704

No one-apartment houses were erected during the year, but the sanction of the Local Authority was given, in terms of Section 111 of the Housing (Scotland) Act, 1925, to the erection of 2 two-apartment dwellings by private builders, and of 340 two-apartment dwellings by the Local Authority.

No schemes under Part II of the Housing Act were in contemplation.

Overcrowding.—Although there are signs that the housing shortage is becoming less acute in the district, if one may take the difficulty experienced in getting suitable tenants for the Committee's houses in certain schemes as a criterion, this is no doubt due to the impoverished state of the district through industrial depression, particularly in the coal mining industry. The average colliery worker is unable to pay the rent demanded for modern housing accommodation, and this, no doubt, encourages the pernicious habit of sub-letting rooms. The Department is alive to the great discomfort and danger to the occupants of such sub-let houses, and during the year several cases of overcrowding were dealt with. Court proceedings were found necessary in one instance, when the respondent was fined 46s., including expenses.

SLUM CLEARANCE.—Definite and substantial progress has been made towards the closure of the worst of the insanitary properties in the District, and, at the time of writing, a total of 1859 houses have actually been dealt with by Closing Orders, while the Department is taking steps to expedite the presentation of representations in respect of a further 474 dwellings fit for closure.

No fewer than 100 representations were made to the Local Authority, under Section 6 of the Housing (Scotland) Act, 1925, that the following 760 dwellings were in a state so dangerous or injurious to health as to be unfit for human habitation, and in every instance a Closing Order was made :—

STRATHAVEN. — 10-12 *Sandknowe*, 4 one-apartment and 1 two-apartment dwellings; 17 *Castle Street*, 1 four-apartment dwelling; 27-31 *Castle Street*, 2 one-apartment, 3 two-apartment, and 1 four-apartment dwellings; 33-37 *Castle Street*, 4 one-apartment, 1 two-apartment, and 1 three-apartment dwellings; 21-25 *North Street*, 3 one-apartment and 2 two-apartment dwellings; 40-42 *North Street*, 3 one-apartment and 1 two-apartment dwellings; 19-21 *Todshill Street*, 2 one-apartment and 2 two-apartment dwellings; 27 *Todshill Street*, 2 two-apartment dwellings; and 4-12 *Todshill Street*, 2 one-apartment, 2 two-apartment, and 1 four-apartment dwellings. In the last case an Appeal against the Closing Order was made and a Proof ultimately allowed, after which the Appeal was dismissed and the Closing Order confirmed, with expenses. As the judgment of the Sheriff-Substitute is of considerable interest, his Interlocutor and Note are given *infra*. Thirteen of the above dwellings have been vacated and closed up, the tenants having found other accommodation, and 16 new houses at Ballgreen, Strathaven, presently being erected with aid of the subsidy, are to be made available for tenants of insanitary houses.

Appeal against Closing Order. — An Appeal was taken by the proprietrix of five dwelling-houses situated at 4 to 12 Todshill Street, Strathaven, in respect of which a Closing Order had been made by the Local Authority. The proprietrix appealed on the grounds that the defects set forth in the representation of the Medical Officer of Health were exaggerated; that such defects as had existed had been repaired at the date of the Appeal; and that the houses were then fit for human habitation. After hearing evidence which extended over two days, and in the course of which a number of medical and sanitary experts were examined, the Sheriff-Substitute refused the Appeal and confirmed the Closing Order. The Court was asked specially to deal with the question of the procedure which ought to be followed in such cases, it being maintained on behalf of the Local Authority that the only proof competent in such an Appeal was as to whether or not the houses referred to were at the date of the Closing Order dangerous or injurious to health. There were conflicting decisions as to the question of expenses in such Appeals, and it was contended for the Local Authority that, as such Appeals are of the nature of judicial proceedings, it is competent for the Court to award expenses. The

Sheriff-Substitute gave effect to these contentions in his Interlocutor and Note, which are as follows :—

HAMILTON, 16th April, 1928.—The Sheriff-Substitute, having considered the cause, Finds in fact that each of five dwelling-houses situated at Nos. 4, 6 (two houses), 8, and 12 Todshill Street, Strathaven, in the Parish of Avondale, belonging to the pursuer, is in a state so dangerous or injurious to health as to be unfit for human habitation : Therefore refuses the appeal and confirms the Closing Order, of date 24th June, 1927, relating to each of the said houses, and decerns : Finds the pursuer liable to the defenders in expenses : Allows on account thereof to be given in, and remits the same when lodged to the Auditor to tax and report. Certifies Mr. Peter Fyfe and Mr. G. Paterson and Dr. Livingstone Loudon for additional allowances as skilled witnesses.

(Signed) W. BOYD BERRY.

Note.—This is an appeal against a Closing Order made by the defenders under Section 8 (1) of the Housing (Scotland) Act, 1925, in respect of five dwelling-houses in Todshill Street, Strathaven, belonging to the pursuer. The appeal is taken on the ground that the defects set forth in the representation of the Medical Officer of Health, which is annexed to the Closing Order, are exaggerated; that such defects as had existed had been repaired at the date of the appeal; and that the houses are now fit for human habitation.

At the proof the pursuer's case was feebly supported by evidence, and indeed disclosed little more than a mere protest against the exercise by the Local Authority of their powers under the Housing Act. In view of the weakness of the pursuer's case, it is unnecessary to consider the evidence in detail. The evidence is really all the one way, and shows beyond room for any reasonable doubt that the five houses in question were, at the date of the Closing Order, in a state so dangerous and injurious to health—to use the words of the Act—as to be unfit for human habitation.

As regards the pursuer's averment that any defects existing at the date of the Closing Order had been repaired, the averment was singularly lacking in proof, which consisted merely of evidence as to an attempt which had been made by Mr. Steele to repair the roof. The evidence for the defenders not only shows that the defect in the roof had not been properly remedied, but it also shows that even a new roof would be insufficient to remove the objection to the inhabitable state of the houses, on the ground of dampness.

But, even if repairs of a substantial nature had been carried out after the date of the Closing Order, I do not think that it would have been competent in this appeal to consider what effects such repairs had in rendering the houses habitable. It seems to me that the only proper subject of inquiry in an appeal against a Closing Order is the state of matters at the time when the Order was made. I should have thought that that was so self-evident as to admit of no doubt whatever, but apparently in certain appeals against Closing Orders consideration has been given to the state of repair as affected by works carried out after the date of the Order, while opportunities also have been granted to owners to execute repairs alleged to be sufficient to put their property in a habitable condition. I think,

with deference to such decisions, that they proceeded upon a wrong view of the provisions of the Housing Acts then in force, due partly to confusing the sections relating to the repair of houses with those relating to Closing Orders made by the Local Authority, and partly to an omission to note the other provisions of the Acts, under which an owner who had executed sufficient repairs after a Closing Order had been made and had become final was enabled to get the Order brought to an end. These provisions of the legislation previously in force are repeated in the Codifying Act of 1925. The sections dealing with the repair of houses on the one hand (Sections 1 to 3) and those relating to Closing Orders, the conditions under which such Orders may be determined, and demolition Orders (Sections 8 to 13) are grouped under two distinct heads, viz., "Provisions for securing the repair, maintenance, and sanitary condition of houses," in the former case, and in the other case, "Closing and Demolition Orders." This separate treatment of the two subjects should make it still clearer that all the Sheriff is entitled to consider in an appeal against a Closing Order is the condition of the houses in question at the time when the Order was made.

As regards expenses, it was maintained for the pursuer that I was sitting in an administrative and not in a judicial capacity, and that I had therefore no power to award expenses. The cases in which it was so decided (such as *White v. the Magistrates of Rutherglen*, 1897, 24 R.446, and *Liddall v. Ballingry Parish Council*, 1908, S.C.1082) are all cases in which the action of the Sheriff is necessary as a part of the machinery for putting the statute in question into operation. In *White's* case the Sheriff was acting under a provision in the Burgh Police (Scotland) Act, 1892, which entrusts to him the revision and extension of the boundaries of a burgh, after hearing all parties interested. The Sheriff was therefore clearly acting there in a ministerial and not in a judicial capacity. So in *Liddall's* case, where the statute was the Burial Grounds (Scotland) Act, 1855, under which the Sheriff is the person entrusted with the designation of lands as a burial-ground. I do not find that that is the position of the Sheriff under the provisions of the Housing Act relating to Closing Orders. It is the Local Authority who are designated by the Act to make such Orders, and the matter only comes before the Sheriff by way of appeal. I think that the Sheriff, therefore, acts purely in a judicial capacity, and that he has therefore the power to award expenses.

BUSBY. — *Black Castle*, 58-42 *Main Street*, 3 one-apartment and 2 two-apartment dwellings; *Hen Lynn*, *Field Road*, 4 two-apartment dwellings; and *Bygestone*, 5 one-apartment and 1 two-apartment dwellings. Of the above houses 7 have been closed, the occupants having found accommodation in the local Housing Scheme, and elsewhere.

STONEHOUSE.—15-19 *Angle Street*, 1 one-apartment and 1 two-apartment dwellings; 46 *Boghall Street*, 1 one-apartment and 1 two-

apartment dwellings; 10 *Boghall Street*, 1 one-apartment and 1 two-apartment dwellings; 23-27 *King Street*, 2 one-apartment and 1 two-apartment dwellings; 51-53 *Lawrie Street*, 1 one-apartment and 1 two-apartment dwellings; 94 *New Street*, 1 one-apartment dwelling; and 4 *Townhead Street*, 1 one-apartment dwelling. Ten of the dwellings have been vacated and closed up, and the building at 15-19 *Angle Street* was demolished.

BLANTYRE.—1-9 *Shuttle Row*; *Blantyre Lodge*; 1-21 *Cross Row*; *Middle Row*; *Newlands*; 2-4 *Mayberry Place*; and *Mid Row*, *Low Blantyre*, comprising 41 one-apartment, 42 two-apartment, 10 three-apartment, and 2 four-apartment dwellings. All the tenants have been removed to houses provided under the Improvement Schemes at Viewfield and Auchenraith. A start has been made with the demolition of the old houses, and, at the time of writing, *Cross Row* and *Blantyre Lodge* have been demolished.

Birthplace of David Livingstone.—It may be of interest to note that in the three-storey portion of the above-mentioned *Shuttle Row* is the reputed birthplace of the great Missionary-Explorer, Dr. David Livingstone. In view of the probability of the historic building being demolished, the “David Livingstone Memorial Trust” acquired the property and surrounding grounds with a view to the reconstruction and conversion of the buildings into a museum, etc. The adjoining grounds are to be tastefully laid out, and, when the scheme is completed, should make a delightful contrast to the present squalid conditions.

236-238 *Glasgow Road*, 1 two-apartment and 1 three-apartment dwellings; 43 *Hunthill Road*, 1 two-apartment dwelling; 89 *Hunthill Road*, 2 one-apartment dwellings; 113 *Broompark Road*, 1 two-apartment dwelling; and 7 *Douglas Street*, 1 two-apartment dwelling. With the exception of the last-mentioned dwelling, all the houses have been shut up, the occupants having been accommodated in the Improvement Scheme at Auchenraith.

BOTHWELL.—33 *Main Street*, 1 one-apartment and 1 two-apartment dwellings. The tenants were given accommodation in the Improvement Scheme houses at Wooddean, and the old houses have been shut up.

BELLSHILL. — 260-268 *Main Street*, 4 one-apartment and 1 two-apartment dwellings. These houses have been closed, and the occupants housed in the Orbiston Improvement Scheme. 11-28

Hamilton Road, 6 one-apartment and 5 two-apartment dwellings. The tenants found for themselves other accommodation, and the old houses were closed. 20 *Hamilton Road*, 1 one-apartment and 1 two-apartment dwellings. The owner intimated an Appeal in this case, which he subsequently withdrew. The houses were closed after the tenants removed to Orbiston Improvement Scheme. 13 *North Road*, 2 one-apartment dwellings, and 15-27 *North Road*, 10 one-apartment, 4 two-apartment, 1 three-apartment, and 1 four-apartment dwellings. The owners of these properties Appealed, and certain negotiations took place with regard to repairs. The Committee advised the owners to lodge a detailed specification of the work they proposed to carry out, but, so far, this has not been done.

MOSSEND.—1-24 *Marion Street*; 1-14 *Watt Street*; 1-7 *Pitt Street*; 1-7 *Centre Street*; and 7-9 *Comet Street*, comprising 29 one-apartment and 24 two-apartment dwellings. The tenants of these houses were removed to the Improvement Scheme at Orbiston, and the old dwellings have been demolished.

HOLYTOWN.—79-83 *Main Street*, 2 two-apartment dwellings; 91-95 *Main Street*, 4 one-apartment and 1 two-apartment dwellings; 97-99 *Main Street*, 2 one-apartment and 1 two-apartment dwellings; 186 *Main Street*, 1 one-apartment and 2 two-apartment dwellings; 196-198 *Main Street*, 1 two-apartment and 1 three-apartment dwellings; 200-208 *Main Street*, 1 one-apartment and 6 two-apartment dwellings. All the above dwellings have been closed, and the tenants removed to the Improvement Scheme at Holytown. 117 *Main Street*, 2 one-apartment dwellings. The tenants were accommodated in Holytown Improvement Scheme, and the old houses demolished. 39 *Main Street*, 1 two-apartment dwelling, and 5-11 *Clark's Land* and 39A-B *Main Street*, 7 one-apartment and 1 two-apartment dwellings belonging to the same owners. An Appeal against the closing of 5 of these dwellings was taken, and later was withdrawn, with expenses to the Committee. All the dwellings, with the exception of No. 39, have been closed, and the tenants removed to Holytown Improvement Scheme. 2A-3B *Sunnyside Row*, 4 one-apartment dwellings. These houses are shut up, and the occupants housed at Holytown Scheme. 23-27 *Main Street* and 1A-5 *Miller's Land*, 10 one-apartment and 1 three-apartment dwellings. All the tenants have removed to the Improvement Scheme at Holytown, and the old houses closed. Part of this property has since been converted into a Licensed Club.

NEW STEVENSTON.—2-20 *Carfin Street* and 41 *Jerviston Street*, 9 one-apartment and 2 two-apartment dwellings; *Fullwood Place*, *Clydesdale Street*, 2 one-apartment and 1 two-apartment dwellings. These 14 dwellings were demolished after the occupants had removed to the Holytown Improvement Scheme.

1A-40 *Napier's Square*, referred to on Page 299 of last Annual Report. In deference to the suggestion of the Court that the proprietrix should be given an opportunity to carry out the repairs which she proposed, the Committee, without prejudice, ultimately agreed to an arrangement with the owner for the repair and improvement of the houses. Included in the scheme for improvement is the conversion of 14 one-apartment back-to-back dwellings into 7 houses of two apartments each. At the close of the year 16 dwellings had been repaired.

Jerviston Square, also referred to on Page 299 of last Annual Report. The Appeal against the Closing Order having been withdrawn, the occupants of the dwellings were removed to new houses at the Improvement Scheme, Carfin. All the old houses were demolished.

CARFIN.—2-16 *Byresknowe*, 7 one-apartment and 1 two-apartment dwellings; 1-8 *Blackship Row*, 8 one-apartment dwellings; and 1-8 *Bellerophon Row*, 6 two-apartment dwellings. All these houses were demolished when the tenants had removed to Holytown Scheme. 13 *Motherwell Road*, 1 one-apartment dwelling. An Appeal against the Closing Order was made by the owner, who subsequently abandoned the Appeal, and the Closing Order became operative. The tenant removed to other premises and the house was shut up.

NEWARTHILL.—69-95 *Church Street*, 7 one-apartment and 5 two-apartment dwellings. 5 houses have been closed, the tenants having found other accommodation. 116-146 *Church Street*, 10 one-apartment and 3 two-apartment dwellings. Only one house has, so far, been closed.

CAMBUSLANG.—81-83 *Lightburn Road*, 2 two-apartment dwellings; 73-79 *Lightburn Road*, 2 one-apartment and 2 two-apartment dwellings; 85-93 *Lightburn Road*, 7 one-apartment and 1 two-apartment dwellings; 95-97 *Lightburn Road*, 1 one-apartment and 1 two-apartment dwellings; 99-105 *Lightburn Road*, 2 one-apartment, 1 two-apartment, and 1 three-apartment dwellings; 106-110 *Lightburn Road*, 2 one-apartment and 1 two-apartment dwellings; 64-67 *Pit*

Row, Newton, 4 two-apartment dwellings; 10-14 *Vicarland Road*, 9 one-apartment and 6 two-apartment dwellings; 22-30 *Vicarland Road*, 7 two-apartment and 1 three-apartment dwellings; 63-71 *Main Street*, 2 one-apartment and 1 two-apartment dwellings; 87 *Main Street*, 2 one-apartment dwellings; 95 *Main Street*, 1 one-apartment and 2 two-apartment dwellings; 111-121 *Main Street*, 4 one-apartment and 4 two-apartment dwellings; 166 *Main Street*, 2 one-apartment dwellings; 191 *Main Street*, 2 one-apartment and 1 two-apartment dwellings; 206 *Main Street*, 1 three-apartment dwelling; 209 *Main Street*, 2 one-apartment, 1 two-apartment, and 1 three-apartment dwellings. A second Closing Order was later made on another two-apartment dwelling at this property. 212 *Main Street*, 1 one-apartment, 3 two-apartment, and 1 three-apartment dwellings; 244 *Hamilton Road*, 1 one-apartment and 4 two-apartment dwellings; 7-9 *Tabernacle Lane*, 1 one-apartment and 1 two-apartment dwellings; 9 *Tabernacle Street*, 2 one-apartment dwellings; and 24 *Cadoc Street*, 1 two-apartment and 1 three-apartment dwellings. All the above dwellings have been closed and the tenants accommodated in the Overton Road Improvement Scheme. The 2 houses at 24 *Cadoc Street* have been demolished. Appeals have been made and Proofs fixed in connection with the Closing Orders on *Rosebank Place*, *Miller Street*, 10 two-apartment dwellings, and 1-3 *Church Street*, 3 one-apartment, 2 two-apartment, and 1 three-apartment dwellings.

CAMBUSNETHAN.—*Clydesdale Rows*, Wishaw, 2 one-apartment, 42 two-apartment, 2 three-apartment, and 3 four-apartment dwellings. 12 of the houses have been vacated, the tenants having obtained accommodation elsewhere. 1-11 *Burnhall Row, Waterloo*, 11 one-apartment dwellings. Only 1 of these dwellings has, so far, been shut up. 1-20 *Torbush Rows, Newmains*, 20 two-apartment dwellings. Accommodation for the occupiers of these dwellings has been provided at Springhill Housing Scheme, and 11 of the old houses were shut up. 1-14 *New Row*; 1-17 *Binnie's Row*; and 1-8 *Ladies' Row, Morningside*, 17 one-apartment and 21 two-apartment dwellings. The tenants of these dwellings have also been offered accommodation in the Springhill and Kingshill Housing Schemes and, so far, 12 families have been removed and their houses closed up.

DALSERF.—*Meadowhill Rows, Larkhall*, 50 one-apartment and 9 two-apartment dwellings situated at Nos. 1-88, 10-79, 101-116, and 129-146. Blocks Nos. 1-88 and 129-146 have been demolished, and 7 houses in

the remaining blocks have been vacated and closed. All the tenants are being offered houses in the Improvement Scheme at Hareleeshill. 1-7 *Longlee, Netherburn*, 4 one-apartment and 3 two-apartment dwellings. The houses are still occupied, but accommodation is being provided for the tenants at Ashgillhead Improvement Scheme.

Surgeoner's Rows, Netherburn, 13 one-apartment dwellings. The tenants were offered accommodation in the Ashgillhead Improvement Scheme.

HAMILTON.—13-17 *Home Farm Rows*, 2 one-apartment and 3 two-apartment dwellings. At the close of the year the tenants were still in occupation.

NEW MONKLAND. — *East Glentore, Longriggend*, 15 one-apartment and 1 three-apartment dwellings. Only 1 tenant still remains, and 7 houses have been demolished.

OLD MONKLAND. — 1-6 *Beech Row, Kirkwood*, 6 two-apartment dwellings. The tenants were removed to the Improvement Scheme at Drumpark, and the old houses closed. 13A-D *Rhindsmuir Road, Baillieston*, 5 one-apartment dwellings. Accommodation for the occupants of these dwellings is being provided at Crosshill Improvement Scheme, but so far only one house has been closed up. 73D *Main Street, Baillieston*, 1 one-apartment dwelling. This house has been closed and the tenant accommodated in Crosshill Improvement Scheme. 2-10, 13, and 21-24 *Long Row, Swinton*, 14 one-apartment, 3 two-apartment, and 1 four-apartment dwellings. Of these houses 9 have been vacated and the tenants removed to the Improvement Scheme at Crosshill. 29-31 *Laigh Crosshill, Baillieston*, 4 one-apartment dwellings. All these dwellings have been closed, and the occupants accommodated at Crosshill Scheme. 4-6 *Camp Row, Baillieston*, 5 one-apartment dwellings. Accommodation is being provided at Crosshill Scheme for the occupants of these houses and already two families have removed.

SHOTTS. — 1-25 *Gartness Square*, 3 one-apartment and 17 two-apartment dwellings. 5 of the dwellings have been closed. 224-228 *Station Road*, 3 one-apartment dwellings; 47-49 *Roschall Road*, 2 one-apartment dwellings; and 1-6 *Currieside, Shotts*, 6 one-apartment dwellings. The owner of these properties Appealed against the Closing Orders, but subsequently withdrew same. Accommodation is provided for the tenants at Springhill Housing Scheme, and, so far, 7 of the

old houses have been vacated and closed up. *Cityside, Cleland*, 5 one-apartment and 2 two-apartment dwellings. An Appeal was also taken in this case, and certain negotiations took place with the owners of the property regarding the repair of the dwellings. The Committee advised the owners to lodge a detailed specification of the work proposed to be carried out, but this had not been done at the time of writing. The case is still in Court.

Insanitary Dwellings.

The Department have continued to press for the introduction of modern domestic and sanitary conveniences, and during the year numerous inspections were made and meetings held with the owners of properties. Difficulties are still being experienced in view of the continued high cost in carrying out improvements, but further progress has been made. The properties dealt with are briefly referred to as under :—

151-155 *Main Street, High Blantyre*. — The 5 one-apartment and 3 two-apartment dwellings without an adequate water supply and water-closet accommodation, referred to on page 300 of last Annual Report, have not yet been finally dealt with.

140-158 *Main Street and 2-4 School Lane, High Blantyre*.—A two-storey stone-built tenement comprising 2 one-apartment, 5 two-apartment, 2 three-apartment, 1 four-apartment, and 1 five-apartment dwellings, without adequate water supply and sanitary conveniences, referred to on page 300 of last Annual Report. The three additional water-closets agreed to be accepted by the Committee as a temporary expedient have not yet been completed.

Craighead Rows, Blantyre.—No arrangement has yet been come to with the owners of these three rows of 106 two-apartment single-storey stone-built dwellings as to improved water-closet accommodation, referred to on page 300 of last Annual Report.

105-119 *Stonefield Road, Blantyre*.—2 one-apartment and 6 two-apartment attic dwellings without proper water supply, referred to on page 300 of last Annual Report. No further houses were vacated during the year, and the number still occupied stands at 5.

191-197 *Main Street, High Blantyre*. — 1 one-apartment, 8 two-apartment, and 2 three-apartment dwellings with insufficient water-closet accommodation, referred to on page 300 of last Annual Report. The additional water-closets agreed to be accepted have now been completed.

10-18 *Stonefield Road, Blantyre*.—The portion of the property numbered 10-12, comprising 1 two-apartment and 1 three-apartment dwellings, and a shop, referred to on page 301 of last Annual Report, changed hands, and the new owner submitted a sketch showing a new water-closet on the stairhead for the two dwellings on the upper floor, a closet on the ground floor for the shop employees, and a new wash-house. The Committee agreed to accept these without prejudice, and the work has been completed. With regard to the portion numbered 16-18, comprising 8 two-apartment dwellings, the owner submitted a plan showing the provision of two new water-closets, one at the top of each stair, which, with the two existing closets, would give one closet for each two occupancies. The Committee agreed to accept these without prejudice, and the work has also been completed.

Hillside, High Blantyre.—2 four-apartment dwellings, referred to on page 301 of last Annual Report. The second bathroom has not yet been provided.

5-7 *John Street, Blantyre*.—The owner of this two-storey tenement property, comprising 12 one-apartment and 4 two-apartment dwellings, has been asked to provide adequate water-closet accommodation, and an inside sink and water supply for each dwelling. The matter is still in hand.

4-14 *Alpine Street, Blantyre*.—24 one-apartment and 6 two-apartment dwellings, and 16-26 *Alpine Street*, 20 one-apartment and 10 two-apartment dwellings, without inside sinks and water supply for each dwelling, and adequate water-closet accommodation. The matter was taken up with the owners, who intimated that, owing to financial difficulties, they were unable to undertake the work of improvement, and the case is still under consideration. The properties are of a poor class and situated in a congested area, and it may be that any further action taken by the Department will be under the Scheme for the Improvement of Insanitary Areas.

7-15 *Watson Street, Blantyre*.—A two-storey tenement, comprising 16 one-apartment dwellings, with insufficient water-closet accommodation. Plans were lodged showing the provision of two additional water-closets on the upper floor, and two on the ground floor of the property, which, with the three existing closets, would give four closets for eight tenants on the ground floor, and three closets on the upper floor for eight tenants. Owing to structural conditions, and as the

property was of considerable age, the arrangement proposed was probably the best that could be made in the circumstances. The Committee accepted the proposals without prejudice, but the work had not been commenced at the close of the year.

3-13 *Greenside Street, Blantyre*.—The inadequacy of the water-closet accommodation at this two-storey tenement, containing 27 one-apartment dwellings, was taken up with the owners, who, rather than go to the expense of providing the necessary additional water-closets, chose to close the houses, and by the end of the year ten dwellings had been vacated.

93-99 *Broompark Road, Blantyre*.—Negotiations are proceeding with the owner of these 2 one-apartment, 3 two-apartment, and 2 three-apartment dwellings, with insufficient water-closet accommodation.

75-77 *Auchenraith Road, Blantyre*.—A two-storey tenement, comprising 16 one-apartment and 2 two-apartment dwellings, with inadequate water-closet accommodation. After negotiations, a plan was submitted by the owner showing two additional water-closets proposed to be erected at the property. As the offer was below the standard required by the Local Authority the owner has been requested to submit fresh proposals.

51-59 *Glasgow Road, Blantyre*.—This tenement property, comprising 12 one-apartment and 6 two-apartment dwellings, is without adequate water-closet accommodation, and the matter was taken up with the owners, who ultimately lodged a plan showing the provision of four new water-closets. Difficulty was experienced, however, in arranging the new closets in such a position that the lighting of two dwellings would not be affected, and the matter is being further explored.

266-272 *Main Street, High Blantyre*.—A two-storey tenement, consisting of 3 one-apartment and 4 two-apartment dwellings. No reply having been received from the owners to communications regarding the inadequacy of the water-closet accommodation at this property, the matter was reported to the Committee, who instructed service of the Statutory Notice. The work of providing the necessary additional water-closets had not been commenced at the close of the year.

4-8 Greenside Street, Blantyre.—A two-storey tenement, comprising 4 one-apartment and 3 two-apartment dwellings, and a single storey row, containing 2 one-apartment and 2 two-apartment dwellings, without sufficient water-closet accommodation. After a meeting with the factors, a plan was submitted showing three additional water-closets, which, with the three existing closets, would give six closets for eleven occupancies. The Committee agreed to accept the proposals without prejudice, but the work has not yet been commenced.

Allison Place.—The owner of this two-storey tenement with attics, comprising 26 one-apartment, 8 two-apartment, and 4 three-apartment dwellings, lodged a plan showing the proposed provision of ten new water-closets to be erected in five towers at the property. He intimated that his intention was to convert the 16 ground-floor one-apartment houses, which are all back-to-back, into through houses of two apartments, and execute certain repairs thereon, also that he did not intend to provide inside sinks and water supply for the 10 attic dwellings. The latter dwellings were all in an uninhabitable condition, and, assuming that the proposed conversions were carried through, the number of dwellings remaining would be 30, and for these ten new water-closets were offered. The matter was referred to the Committee, who decided that, in view of the fact that the dwellings were all on the list of houses to be dealt with under the Scheme for the Improvement of Insanitary Areas, the owner should submit satisfactory proposals for putting the property into a reasonable state of repair, failing which a Closing Order would be prepared.

Douglas Park Square, Bellshill.—Referred to on page 301 of last Annual Report. The conversion of the single-apartment dwellings into houses of two apartments has not yet been commenced, as none of the tenants has removed.

34-44 Douglas Park, Bellshill.—Referred to on page 301 of last Annual Report. The scullery, inside sink, water supply, and water-closet for each of the 1 one-apartment and 10 two-apartment dwellings situated at the corner of Orbiston Road and Hamilton Road, Bellshill, have been completed.

Bothwellpark Rows.—Referred to on page 301 of last Annual Report. The question of water-closet accommodation is still in abeyance, owing to the lack of sewerage facilities.

Cockhill Place, Bothwellpark.—The absence of satisfactory sewerage facilities for the 11 two-apartment dwellings referred to on page 301 of last Annual Report still delays the introduction of water-closet accommodation, and the abolition of the existing privy-midden.

50-66 *Stevenston Street, New Stevenston.*—16 one-apartment, 9 two-apartment, and 1 three-apartment dwellings, referred to on page 302 of last Annual Report. No further improvements have been carried out at this property during the year.

39-47 *Carfin Street, New Stevenston.*—New sinks have now been provided for the 1 one-apartment and 6 two-apartment dwellings, referred to on page 302 of last Annual Report.

Lauchope Place, Chapelhall.—18 one-apartment and 12 two-apartment dwellings, referred to on page 302 of last Annual Report. A scullery, fitted with inside sink, water supply, and a water-closet was provided for each of the 12 two-apartment dwellings, comprising the front property, in accordance with the plan which was approved by the Committee. Nothing was done, however, in the way of converting the ground-floor houses so as to give access to the sculleries from the kitchen instead of from the bedroom as at present, nor had any proposals been put forward for the provision of inside sinks, water supply, and water-closet accommodation for the 18 dwellings comprising the rear portion of the property, and the owner is being pressed for definite proposals in regard to these matters.

Hattonrigg Terrace, Bellshill.—The question of the provision of an inside sink and water supply for each of these 32 two-apartment dwellings was taken up with the owners, and, at a meeting with their representative, it was suggested that improvements at this property, similar to those executed at their houses at Bardykes Terrace, Cambuslang, referred to on page 192 of this Report, might be carried out if a little delay were granted so that the effect of the Bardykes improvements could be seen. Further negotiations are meantime suspended.

148 *Main Street, Bellshill.*—The owner of this three-apartment dwelling has been asked to provide a water-closet in lieu of the existing pail privy.

Chapelhall.—50-56 *Lauchope Street*, a new scullery and water-closet have been erected at a three-apartment dwelling here. 45 *Lauchope*

Street, 1 two-apartment dwelling. An inside sink, water supply, and water-closet have been provided. 26-28 *Lauchope Street*, 2 two-apartment dwellings. An inside sink and water supply for each house, and a water-closet were installed. 22 *Russell Street*, a porch, including a water-closet and wash-hand basin have been provided for this three-apartment dwelling.

72-76 *Main Street, Chapelhall*. — 2 two-apartment and 1 three-apartment dwellings. Negotiations with the owner are proceeding for the provision of adequate water-closet accommodation for these dwellings.

177-179 *Campsie Terrace, Newarthill*. — Two single-storey rows, comprising 12 two-apartment dwellings, without proper domestic and sanitary conveniences. Negotiations having failed, the Statutory Notice requiring the provision of inside sinks, water supply, and water-closet accommodation, was served. No steps were taken by the owner to comply with the requirements of the notice, and the Committee decided that the case should be reported to the Procurator-Fiscal for prosecution.

2-20 *Campsie Terrace, Newarthill*. — 3 one-apartment, 8 two-apartment, and 1 three-apartment dwellings, without inside sinks, water supply, and water-closet accommodation. The owners have been requested to submit proposals with regard to the provision of proper and adequate domestic and sanitary conveniences.

238 *Main Street, Holytown*.—A new inside sink and water supply were installed in this two-apartment dwelling.

61-63 *Carfin Street, New Stevenston*.—2 two-apartment dwellings. An inside sink and water supply were provided in each of these houses.

44-48 *Stevenston Street, New Stevenston*.—2 one-apartment, 2 two-apartment, and 1 three-apartment dwellings. No proposals having been made for inside sinks, water supply, and additional water-closet accommodation at these dwellings, the Statutory Notice was served on the owner.

60-64 *Motherwell Road, Carfin*. — 1 two-apartment and 1 five-apartment dwellings. A plan was submitted by the owner showing the provision of a water-closet and wash-hand basin for the five-apartment dwelling, and a water-closet for the two-apartment dwelling. The work has been completed.

Bardykes Terrace, Cambuslang. — 12 two-apartment and 4 three-apartment dwellings, referred to on page 303 of last Annual Report. A start was made on the scheme for the erection of a scullery for each dwelling, fitted with inside sink, water supply, wash-tub, boiler, bath, and water-closet, but at the end of the period under review, the whole work had not been completed.

1-5 *Overton Street*, 220-222 *Hamilton Road*, and 1-7 *Mill Road*, *Cambuslang*.—Plans were submitted showing the provision of nine new water-closets for the 54 two-apartment dwellings, referred to on page 303 of last Annual Report. Nine water-closets existed at the property, and the nine additional closets would give a proportion of one closet to every three dwellings. In view of structural difficulties the Committee accepted the proposals, without prejudice, and the work has since been completed.

13 *Cadoc Street*, *Cambuslang*.—4 two-apartment and 1 three-apartment dwellings; 2-10 *Howieshill Road*, 10 one-apartment and 3 two-apartment dwellings; and 12 *Howieshill Road*, 2 one-apartment and 3 two-apartment dwellings, referred to on page 304 of last Annual Report. The Statutory Notice having been served, the owner submitted plans showing (a) the provision of an additional water-closet for 13 *Cadoc Street*, and (b) 2-10 *Howieshill Road*, an additional water-closet, making four for twelve tenants, as the tenant of a single-back apartment at No. 2 had been warned out, and the house would be shut up. With regard to 12 *Howieshill Road*, one of the tenants of the single-apartment dwellings had also been warned out, and it was the owner's intention also to close the other one-apartment dwelling, thus only three tenants would remain for the existing water-closet. The Committee, having regard to the age and structural condition of the properties, agreed to accept the proposals meantime as a temporary provision, and without prejudice. The work was duly carried out.

12-16 *Cadoc Street*, *Cambuslang*. — 3 one-apartment and 2 two-apartment dwellings with only one water-closet, referred to on page 305 of last Annual Report. After further negotiations with the owner an amended plan was submitted showing the provision of an additional water-closet at the stair-head for the two upper-floor tenants, and another closet in part of a coal-cellar under the stair for the two ground-floor houses. The Committee agreed to accept the provision of the two new water-closets meantime, without prejudice, and the work has been completed.

78-86 *Lightburn Road, Cambuslang*.—The two additional water-closets accepted by the Committee, without prejudice, for this property, comprising 7 one-apartment and 4 two-apartment dwellings, referred to on page 306 of last Annual Report, have now been completed.

6-8 *Clydeford Road, Cambuslang*.—2 three-storey tenement properties, each comprising 5 one-apartment and 8 two-apartment dwellings, referred to on page 307 of last Annual Report. After further negotiations the owner intimated that, instead of his providing extra water-closet accommodation, he would reduce the number of tenancies by converting 2 one-apartment dwellings on the ground-floor of each tenement into one house of two apartments, and make a three-apartment house of a two-apartment and a one-apartment dwelling. On each of the upper flats he would convert a two-apartment and a one-apartment dwelling into one house of three apartments, thus eliminating all the one-apartment dwellings and reducing the tenancies on each flat to three, making the total tenancies in each tenement nine, instead of thirteen as at present. After consideration, the Committee agreed to the proposals put forward by the owner, without prejudice to their right to call for the provision of a water-closet for each dwelling at a future date if they considered this expedient, and also on condition that the owner undertook that the proposed alterations in the occupancy of the property would be carried out within a reasonable period. At the close of the year only one single-apartment dwelling had been closed.

3 *Church Street, Cambuslang*.—A four-storey tenement property, comprising 14 one-apartment and 4 two-apartment dwellings, with inadequate water-closet accommodation. The owner suggested that, in view of financial difficulties, the matter should be delayed for a year, but the Committee decided that the request could not be granted. Later, however, a representation under the Housing Act was made in respect of the basement dwellings in this property, and, as an Appeal was taken by the owner, the case is still in Court. The question of increased water-closet accommodation is, therefore, in abeyance.

4 *Colebrooke Street, Cambuslang*.—A three-storey tenement property, containing 6 one-apartment and 5 two-apartment dwellings, with insufficient water-closet accommodation. The owner has been asked to send in his proposals.

Clydesdale Rows, Wishaw. — A Closing Order was made on the 3 one-apartment, 41 two-apartment, and 3 four-apartment dwellings.

referred to on page 307 of last Annual Report and at the close of the year twelve houses were shut up, the occupants having found other accommodation.

1-24 *Main Street, Newmains*.—A plan was submitted by the owner of these 24 two-apartment dwellings, referred to on page 307 of last Annual Report, showing proposals for the introduction of an inside sink and water supply for each dwelling. The Committee approved of the proposals, and the work was duly carried out.

Ladies' Row, &c., Morningside.—Closing Orders were made on all the houses at *Ladies' Row, Binnie's Row, New Row, and Torbush Row*, comprising 17 one-apartment and 41 two-apartment dwellings, referred to on page 308 of last Annual Report. Twenty-three of the dwellings have been vacated, and the remaining tenants have been offered accommodation in the Committee's Housing Schemes at Springhill and Kingshill.

Mitchell Place, Morningside.—Referred to on page 308 of last Annual Report. No new development took place during the year with regard to the provision of modern sanitary conveniences at these 29 two-apartment dwellings, and at *School Row, Chapel*, 6 two-apartment dwellings, on account of difficulties as to sewage disposal.

1-19 *Manse Road, Newmains*.—19 two-apartment dwellings. An inside sink and water supply were provided for each house in accordance with the plan submitted.

2-46 *Hope Street, Newmains*.—A plan was lodged showing the provision of an inside sink and water supply for each of the 23 dwellings at this property, but the work has not yet been completed. The owners were asked to submit proposals in regard to their other properties in the district which were without inside sinks and water supply, viz., *Comely Bank*, 4 dwellings; *Whitestripe*, 2 dwellings; 2-13 *Store Row*, 11 dwellings; *Stable Court*, 7 dwellings; and 16-43 *Stable Row*, 28 dwellings. With regard to the latter property, the 14 one-apartment dwellings at Nos. 16 to 29 were found to be in a bad state of repair, and the owners decided to close the houses as they became vacant. Under this arrangement six dwellings are now empty and boarded up.

Allanbank, Allanton.—A new water-closet has been provided for each of these 2 three-apartment dwellings.

West Lodge, Allanton.—The work of providing a water-closet and wash-hand basin at this three-apartment dwelling has been completed.

Springbank, Chapel.—At this three-apartment dwelling a new water-closet was provided.

Old Chapel Houses, Stane.—The owner of these 2 three-apartment dwellings has provided a sink, water supply, and water-closet for each house.

Stane Place, Shotts.—Slight progress was made on the work of conversion, and provision of sculleries at the 72 one-apartment back-to-back dwellings at Stane Place, referred to on page 308 of last Annual Report, only one block, comprising 12 houses, having been dealt with, and completed. The Company were requested to proceed with the remainder of the work, but they stated that, owing to the high costs involved, they could not meantime complete the improvements. Negotiations are still in progress.

190-196 *Hamilton Road, Torboothie.*—No further progress has been made towards the provision of water-closet accommodation at these 4 two-apartment dwellings, referred to on page 308 of last Annual Report.

Overtown.—Negotiations are proceeding with the owners of the following properties as to the provision of proper domestic and sanitary conveniences:—*Old Station*, 1 one-apartment, 7 two-apartment, and 1 three-apartment dwellings; *Glenview*, 1 two-apartment dwelling; *Gladstone Place*, 5 dwellings; *Victoria Place*, 12 two-apartment dwellings; *Girdwood's Land*, 4 one-apartment and 4 two-apartment dwellings; *Thatch Cottage*, 1 two-apartment dwelling; *Hayfield Place*, 3 two-apartment and 1 five-apartment dwellings; *Meadowview*, 2 one-apartment and 2 two-apartment dwellings; *Bentfoot*, 2 one-apartment and 12 two-apartment dwellings; *Hawthorn Cottage*, 1 one-apartment and 1 two-apartment dwellings; *Co-operative Buildings*, 2 two-apartment dwellings; *Pine Place*, 2 one-apartment and 4 two-apartment dwellings; *Overtown Store*, 1 three-apartment dwelling; *Hamilton's Land*, 6 one-apartment and 8 two-apartment dwellings; *Bloomfield Cottage*, 1 three-apartment dwelling; *Glengoven Cottage*, 1 two-apartment and 1 four-apartment dwelling; *Clydesdale Place*, 2 one-apartment and 1 four-apartment dwellings; and *Stone Row*, 11 one-apartment and 12 two-apartment dwellings.

Meadowhill Rows, Larkhall.—Closing Orders were made during the year on 50 one-apartment and 9 two-apartment dwellings, situated at Nos. 1-88, 10-79, 101-116, and 129-146 Meadowhill Rows, referred to on page 308 of last Annual Report. All the tenants are being offered accommodation in the Hareleeshill Improvement Scheme.

Burnside Place Larkhall.—A water-closet has now been provided for the 2 two-apartment dwellings referred to on page 309 of last Annual Report.

Low Shawsburn.—The work of providing additional water-closets, wash-house accommodation, and inside sinks and water supply at these 10 two-apartment dwellings, referred to on page 309 of last Annual Report, has now been completed.

Cornsillock Rows, Dalserf.—The temporary closing of the colliery here, on account of depression in the coal industry, has further delayed the provision of water-closets and inside sinks with water supply for the 60 two-apartment dwellings referred to on page 309 of last Annual Report.

Ayr Road Rows, Dalserf.—Arrangements have been made with the owners of these 40 two-apartment dwellings, referred to on page 309 of last Annual Report, for the closing of the dwellings as they become vacant, and, under this arrangement, six of the houses had been shut up at the close of the year.

Swinhill Terrace, Dalserf.—The sanitary improvements for these 49 two-apartment, 2 three-apartment, and 1 four-apartment dwellings, referred to on page 309 of last Annual Report, are still in abeyance on account of difficulties with regard to sewage disposal.

Surgeoner's Rows, Netherburn.—A Closing Order was made on these 13 one-apartment dwellings, referred to on page 309 of last Annual Report. Houses in the Ashgillhead Improvement Scheme were made available for the tenants of the old dwellings.

7-13 Montgomery Street, Larkhall.—No satisfaction having been obtained from the owner of these 4 two-apartment dwellings, referred to on page 310 of last Annual Report, with regard to the provision of inside sinks and water supply, the Statutory Notice was served. As the requirements of the Notice were not complied with, the Committee gave instructions for Court proceedings to be instituted.

148 *Raploch Street, Larkhall*.—The owner of this two-apartment dwelling was requested to provide a water-closet and demolish a privy-midden, but as no satisfaction could be obtained in the matter the Statutory Notice was served. Further delay necessitated Court proceedings being taken against him, when he pled not guilty, and the case was adjourned for Proof. After trial the accused was found guilty, and a further adjournment was made to allow him an opportunity of complying with the Order. The necessary water-closet was duly provided, and on an application by the Local Authority for recovery of the penalties due under the Statute the Court fined the accused £2, with the alternative of 10 days' imprisonment.

36-50 *Raploch Street* and 7-9 *Crossgates Street, Larkhall*.—13 one-apartment and 4 two-apartment dwellings without adequate water-closet accommodation and inside sinks and water supply. Certain of the one-apartment dwellings were being restored to their original size of two apartments, and a plan was submitted by the owner showing the provision of inside sinks, with water supply, for 5 two-apartment houses, and two new water-closets. Further adjustments being necessary, the matter is still being pursued.

60-70 *Raploch Street, Larkhall*.—Proposals were asked of the owner of these 6 one-apartment dwellings in respect of the inadequacy of water-closet accommodation and lack of inside sinks with water supply, but as the request was ignored the Statutory Notice was served. Subsequently the owner stated that a sink would be put into each dwelling and two water-closets erected against the retaining wall at the end of his feu. The latter proposal, however, is inadequate, and the position of the closets could not be accepted as being convenient to the dwellings. The matter is still under discussion.

1-12 *Ross's Court* and 84 *Raploch Street, Larkhall*.—12 one-apartment, 1 two-apartment, and 1 three-apartment dwellings, without inside sinks and water supply. After service of the Statutory Notice the owner lodged a plan showing the provision of an inside sink and water supply for each dwelling, and the work has now been completed.

2-12 and 18-20 *High Glengowan, Larkhall*.—3 one-apartment and 5 two-apartment dwellings. No reply having been received from the owner to communications regarding the provision of inside sinks and water supply, the Statutory Notice was served on him. A plan was afterwards submitted showing the necessary improvements, together

with a request for delay, in view of trade depression in the District. After consideration the Committee acquiesced, and granted delay till 1st May next on the understanding that, prior to that date, all necessary preliminary arrangements would be made for the work proceeding at the date mentioned.

7 Miller Street, Larkhall.—2 one-apartment dwellings without inside sinks, water supply, water-closet accommodation, and drainage facilities. The owner has been asked for his proposals in connection with the introduction of these conveniences.

107-119 and 125-127 Machan Road, Larkhall.—After service of the Statutory Notice, the owner of these 5 one-apartment and 4 two-apartment dwellings installed a sink and water supply in each house.

11 Hill Street, Larkhall, 1 one-apartment dwelling; *27 Hill Street,* 2 one-apartment dwellings; and *9 Home Place,* 1 one-apartment dwelling. A new water-closet has been provided at each of these properties, and at the *Police House, Rosebank,* a bath and water-closet were installed.

Hill Terrace, Netherburn.—Two single-storey brick rows, comprising 23 two-apartment dwellings, without domestic and sanitary conveniences. The matter was taken up with the Colliery Company owning the houses, and in a communication they stated that, as the life of the colliery was only another two years, they were unable to undertake the expense necessary to carry out the work of improvement. The subject is in abeyance meantime.

Udston Rows, Hamilton.—There have been no further developments with regard to the proposed reconstruction scheme, referred to on page 310 of last Annual Report.

Eddlewood Rows, Hamilton.—24 one-apartment, 153 two-apartment, 12 three-apartment, and 2 four-apartment dwellings, referred to on page 310 of last Annual Report. In view of the delay in completing the new sanitary improvements at these dwellings, the matter was taken up with the Coal Company, who explained that they were in a state of financial embarrassment, and unable to carry on with the improvements meantime, owing to the present state of the coal trade. They also indicated that they could give no assurance when it might be possible to resume the work.

Quarter.—Drainage facilities not yet being available, the provision of water-closet accommodation for this village, referred to on

page 310 of last Annual Report, has been delayed. The conversion of a portion of *Carscallan Row* into 6 two-apartment and 1 three-apartment dwellings, each with a scullery, has been completed, and the other portion of the row, comprising 11 one-apartment and 1 two-apartment dwellings, is in course of demolition.

22 *Maxwellton, East Kilbride*.—Three additional water-closets were provided and an inside sink and water supply installed in each of these 7 dwellings, referred to on page 310 of last Annual Report.

10 *Glebe Street, East Kilbride*, 2 two-apartment dwellings; and 44 *Maxwellton*, 3 two-apartment dwellings. An additional water-closet was provided at each of these properties.

Davidson Place, Glenmavis.—A sink and water supply have been installed in each of these 3 one-apartment and 3 two-apartment dwellings.

Chapelbank, Glenboig.—A plan was lodged on behalf of the owners of these 5 one-apartment and 1 two-apartment dwellings showing the provision of a scullery, fitted with inside sink, water supply, and water-closet for each house, together with the necessary drainage arrangements, including a cesspool. The work has been completed. In addition each dwelling has been supplied with a dustbin, and the existing privy-midden was demolished.

Beech Row, Kirkwood.—A Closing Order was made on these 6 two-apartment dwellings, referred to on page 311 of last Annual Report. The tenants were removed to the Improvement Scheme at Drumpark, and the old houses were closed up.

35-49 *Burnside, Baillieston*.—Modern sanitary accommodation has now been provided at these 8 two-apartment dwellings, referred to on page 311 of last Annual Report.

Calderbank.—4 one-apartment dwellings at *Old Square*, referred to on page 311 of last Annual Report, were closed voluntarily by the owners. *Welsh Row*, formerly comprising 28 one-apartment dwellings, is in course of demolition, and 58A-G *Main Street*, 6 one-apartment dwellings, were also closed during the year.

54A-58 *Causewayside Street, Tollcross*.—A plan was submitted showing four additional water-closets to be provided at these 11 two-apartment dwellings, referred to on page 311 of last Annual Report. With the existing two water-closets the proportion would now be six closets for eleven occupancies, and the Committee accepted the proposal without prejudice. The work has since been completed.

Gartgill Square.—The 16 one-apartment, back-to-back dwellings, numbered 25 to 40, are being converted into 8 two-apartment houses. The question of providing proper sanitary conveniences for all the dwellings has been taken up with the owners.

Boghall Square, Broomhouse.—2 one-apartment dwellings were closed voluntarily by the owners during the year.

112, &c., *Causewayside Street, Tollcross*.—5 one-apartment, 7 two-apartment, 1 three-apartment, and 2 four-apartment dwellings, with inadequate inside sinks, water supply, and water-closet accommodation. After negotiations a plan was lodged by the owner showing the provision of an additional three water-closets on the ground floor, which will give seven closets for fourteen tenancies. The plan also showed the introduction of inside sinks and water supply for the two dwellings numbered 118F, which had no inside water supply. The Committee accepted the proposals meantime, without prejudice, and permission was given to proceed with the work.

69-73 *Glasgow Road, Barrachnie*.—2 one-apartment and 1 three-apartment dwellings. The owner submitted proposals for the erection of two new water-closets, which were accepted. The work is not yet completed.

17-23 *The Faulds, Baillieston*.—Three new water-closets were accepted by the Committee, without prejudice, for these 5 dwellings, and the work has been completed.

18-24 *Church Street, Baillieston*.—A one storey building, with attic flat, comprising 1 one-apartment, 2 two-apartment, 1 three-apartment, and 1 four-apartment dwellings. Certain of the houses were without inside sinks, water supply, and adequate water-closet accommodation. The trustees of the property realised the need for such improvements, but as the expenditure involved would be entirely disproportionate to the value of the subjects they could not sanction the expenditure. They gave an undertaking however, that as the dwellings became vacant the houses would be closed, and under this arrangement the tenancy of one of the dwellings has been terminated. In the circumstances it has been decided not to press the matter meantime.

1 *Maxwell Street* and 2 *Glasgow Road, Baillieston*.—An arrangement was made with the factors that these 2 one-apartment dwellings, without inside sinks and water supply, would be converted into a house of two apartments, with an inside sink and water supply. The work has been completed.

Garret Row, Shotts.—The structural alterations and sanitary improvements at these 12 one-apartment back-to-back dwellings, referred to on page 312 of last Annual Report, have now been completed, and the houses are re-occupied.

Currieside, Shotts.—A Closing Order was made on these 6 one-apartment dwellings, referred to on page 312 of last Annual Report, accommodation for the tenants having been provided at Springhill Housing Scheme.

90 *Rosehall Road, Shotts.*—The inside sink, water supply, and water-closet accommodation for this two-apartment dwelling, referred to on page 312 of last Annual Report, have not yet been provided.

9-17 *Shotts Kirk Road, Shotts.*—The owner of these 5 two-apartment dwellings, referred to on page 312 of last Annual Report, failed to comply with the requirements of the Statutory Notice, and proceedings in Court were instituted against him. At the first diet he pled not guilty, and stated that the property did not belong to him. The case was continued for Proof, when he pled guilty, and a further continuation was granted to allow him an opportunity of complying with the terms of the Notice. Subsequently an inside sink and water supply for each of the dwellings and three water-closets were provided, the latter being accepted by the Committee without prejudice. Later the Court imposed a fine on the owner of £2, with the alternative of ten days' imprisonment.

West Benhar.—8 one-apartment and 147 two-apartment dwellings, referred to on page 312 of last Annual Report. It was found expedient to make another joint-application with the owners to the Sheriff to extend for another year the date fixed by him for the closure of the houses, in view of there still being 40 of the dwellings occupied. So soon as housing accommodation is available for these tenants under the Improvement Scheme or otherwise they will be notified to remove, so that the old houses may be demolished.

Eastfield Row, Harthill.—There was no change in the circumstances during the year at these 8 two-apartment dwellings, nor at *Peden Place, West Benhar*, 15 two-apartment dwellings, all in an uninhabitable condition, and referred to on page 313 of last Annual Report.

Forrestfield.—The inside sinks, water supply, water-closet, and wash-house accommodation agreed upon for these 1 one-apartment and 6 two-apartment dwellings, referred to on page 313 of last Annual Report, have now been completed.

Russell's Land, Cleland.—8 one-apartment, 2 two-apartment, and 2 three-apartment dwellings referred to on page 313 of last Annual Report. The two additional water-closets accepted by the Committee as a temporary provision had not been installed within a reasonable time, and the owner was communicated with regarding the delay. He replied asking that the Committee should not insist upon the provision of the additional closets meantime, in view of the fact that the tenants were considerably in arrear with their rents, and that he was unable at present to meet the expense which would be involved. In the circumstances the Committee decided to grant the owner a further period of six months in which to complete the work.

29-31 *Omoa Road, Cleland.*—No further progress has been made with the provision of proper water supply and water-closet accommodation for the 5 one-apartment dwellings, referred to on page 313 of last Annual Report.

Scott's Land, Cleland.—The arrangement that the 12 one-apartment and 4 two-apartment dwellings, referred to on page 313 of last Annual Report, would be closed by the owner as they became vacant, has resulted in other six dwellings being shut up. Six houses remained occupied at the close of the year.

Cityside, Greenhill, Cleland.—A Closing Order was made on these 5 one-apartment and 2 two-apartment dwellings, referred to on page 313 of last Annual Report. Three of the dwellings have been vacated and shut up.

Main Street, Salsburgh.—After considerable delay, the work of providing inside sinks, water supply, and water-closet accommodation was carried out at these 4 two-apartment dwellings, referred to on page 314 of last Annual Report.

124-130 *West Main Street, Harthill.*—An inside sink and water supply for each dwelling and two new water-closets were provided at these 3 two-apartment and 1 three-apartment dwellings, referred to on page 314 of last Annual Report.

Hirstrigg Cottages, Salsburgh.—2 one-apartment and 5 two-apartment dwellings. Four new water-closets have been provided, together with new fireclay sinks to replace those of cast-iron in the sculleries.

67-95 *Main Street, Harthill.*—Eight water-closets were provided for these 16 two-apartment dwellings, and accepted as a temporary provision by the Committee, without prejudice.

97-115 *Main Street, Harthill*.—A plan showing the provision of five new water-closets for these 9 two-apartment and 1 three-apartment dwellings was lodged, and the Committee accepted the proposals without prejudice. The work has not yet been commenced.

158-168 *Main Street, Harthill*.—5 two-apartment dwellings, without sufficient water-closet accommodation, there being only one closet for the five occupances. The owners have been requested to submit proposals in the matter.

Station Cottages, Hartwood.—Plans were submitted and approved showing a scullery fitted with inside sink and water supply, a larder, and a bathroom fitted with bath, wash-hand basin, and water-closet, at each of these 6 two-apartment dwellings. The improvements have been completed.

Preston Cottage, Dykehead.—A new scullery and water-closet have been provided at this three-apartment dwelling.

Gray Street, Shotts.—11 two-apartment and 3 three-apartment dwellings. After negotiation a plan was submitted by the owners showing a scullery fitted with inside sink, water supply, wash-tub, wash-boiler, water-closet, and coal cellar for each dwelling. The plan was approved, and permission given to proceed with the work.

32 *Townhead Street, Stonehouse*. — A two-apartment dwelling, referred to on page 287 of the Annual Report for 1925. Difficulties emerged as to the ownership of this property, and after lengthy correspondence the Statutory Notice was ultimately served. Nothing was done, however, and Court proceedings were instituted against the owner, who pled guilty, and was fined £2, with the alternative of 10 days' imprisonment. The necessary water-closet was duly provided.

9 *Green Street, Stonehouse*.—The Committee agreed that a Representation be prepared with a view to a Closing Order being made in respect of this two-apartment dwelling, referred to on page 314 of last Annual Report. As previously stated, the owner decided to close the premises as soon as they became vacant, but up to the time of writing the tenant is still in occupancy.

Stonehouse.—At the request of the Department, water-closet accommodation has been provided at the following properties:—34 *Townhead Street*, 1 two-apartment dwelling; 54-56 *Townhead Street*, 2 two-apartment dwellings; 58-60 *Townhead Street*, 2 two-apartment dwellings; 36 *Laurie Street*, 3 one-apartment and 1 two-apartment

dwellings; 55 *Cannethan Street*, 1 two-apartment dwelling; *Old Smithy, Sandford*, 1 two-apartment dwelling; and *Waterside, Sandford*, 1 two-apartment dwelling. Negotiations are proceeding with the owners of the following properties, with a view to the introduction of water-closet accommodation: — 12 *Townhead Street*, 2 two-apartment dwellings; 1 *Lockhart Street*, 2 one-apartment and 1 two-apartment dwellings; and 23-25 *Lockhart Street*, 2 two-apartment dwellings.

The Ward, Strathaven.—A new water-closet has been provided at these 2 two-apartment dwellings.

HOUSING (RURAL WORKERS) ACT, 1926.—A Scheme prepared under the Housing (Rural Workers) Act, 1926, of assistance in aid of the reconstruction and improvement of houses and buildings for the accommodation of agricultural workers and other persons whose economic condition is substantially the same as such workers was sanctioned by the Committee. So far the new enactment appears to be a dead-letter in this District, as not a single application for assistance under the Scheme was received during the year.

WATER SUPPLY, CLOSET ACCOMMODATION, &c.—In connection with the Board's circular requesting information as to the number of closets on the conservancy system converted to the water-carriage system, as well as the number of privies, &c., remaining at the end of the year, also the number of houses without water supply, &c., the table opposite was prepared. It should, however, be noted that many of the dwellings shown in the table as having inadequate sanitary conveniences are on the list for closure under the Committee's Scheme for the Improvement of Insanitary Areas.

SEASONAL WORKERS.—An intimation was received from a Hamilton potato merchant on 10th October that, in terms of the Local Authority's By-laws as to the provision of proper accommodation for seasonal workers he intended to employ seven male and six female seasonal workers at Greenhill Farm, Cleland, on 10th October. As no previous intimation had been received from the farmer, he was that day interviewed, when it was pointed out that application should have been made by him at least 28 days prior to the date on which it was proposed to occupy the accommodation. The farmer explained that he had sold about four acres of potatoes to the merchant, and was under no obligation other than the provision of

TABLE SHOWING NUMBER OF OCCUPIED HOUSES IN POPULOUS PLACES WITHIN THE DISTRICT, AND THE NUMBER OF COMMON WATER-CLOSETS, DRY CLOSETS, PRIVY-MIDDENS, AND ASHPITS, SERVING 2, 3, 4, AND 5 OR MORE TENANTS, RESPECTIVELY, ALSO THE NUMBER OF HOUSES WITHOUT WATER SUPPLY AND SINK INSIDE THE HOUSE.

Locality.	Number of Occupied Houses.	Water-Closets.					Dry Closets.					Privy-middens.					Ashpits.					Houses without water and inside sink.
		2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5	
Aitkenhead, &c.,	-	169	9	28	2	1	-	-	-	-	-	-	-	-	1	12	43	-	-	-	-	5
Baillieston, -	-	97	41	54	14	1	-	-	-	-	-	-	-	-	2	3	7	13	-	-	-	-
Bellsbill, &c.,	-	297	182	131	17	-	-	-	-	-	-	-	-	-	-	8	3	-	-	-	-	-
Blantyre, -	-	240	219	210	50	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Botwell, -	-	68	31	3	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Bushy, -	-	27	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderbank, -	-	456	-	1	2	1	-	-	-	-	-	-	-	-	15	2	3	36	3	-	-	1
Cambuslang, -	-	335	484	217	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	212
Carmyle, &c.,	-	909	25	25	1	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-	28
Cleland, &c.,	-	708	113	62	5	-	-	-	-	-	-	-	-	-	22	25	12	5	11	8	3	1
Dalziel, &c.,	-	337	28	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57
East Kilbride, -	-	626	34	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42
Gartlea, -	-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72
Glengowan, &c.,	-	395	11	3	-	18	10	22	12	12	2	2	5	20	-	-	-	-	-	-	-	23
Hamilton Road, -	-	104	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Holytown, &c.,	-	2,429	251	97	101	9	-	1	-	-	2	11	3	6	2	1	3	6	2	1	2	7
Larkhall, -	-	2,871	408	76	66	2	-	-	-	-	6	4	-	-	4	1	1	4	4	1	1	1
Newarthill, -	-	606	35	6	7	1	1	-	-	-	20	25	23	21	13	13	16	13	16	27	27	
Newmains, -	-	893	115	16	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158
Salsburgh, -	-	190	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59
Shotts, &c.,	-	2,036	180	80	25	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	268
Stonehouse, -	-	801	127	25	6	1	1	-	-	-	14	2	-	-	-	-	-	-	-	-	-	68
Strathaven, -	-	1,171	98	82	29	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91
Uddingston, -	-	1,824	168	65	32	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48
Waterloo, &c.,	-	780	23	2	4	-	-	-	-	-	40	28	19	29	9	4	8	29	9	4	8	32
Totals,	-	33,018	2,907	1,544	987	157	26	12	22	19	169	267	132	149	70	47	58	149	70	47	58	72

“horse work,” although the merchant had suggested that the workers might be accommodated in a disused bothy at the farm. As, however, the workers had not then arrived, and in view of the requirements of the By-laws, he would not allow them to be housed at the farm. Other lodging accommodation was, however, provided by the merchant, and no further action was necessary.

RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACTS, 1920 TO 1925.

—The number of applications by tenants for certificates received during the year was 77. In every instance a careful inspection of the premises was made, and a report submitted for the consideration of the Committee. The certificates granted by the Committee numbered 52, including an application continued from the previous year; 9 were refused; and the remainder were being dealt with at the close of the year.

Intimation was sent to the owner of each dwelling giving details of the defects found, and in many instances repairs were immediately carried out.

The following table shows the number of certificates granted since the commencement of the Act, and the cases in which repairs were executed :—

Parish.			Number of Certificates Granted.	Houses in which Repairs have been Executed.	Number still being dealt with.
Avondale,	...	...	12	12	—
East Kilbride,	...	...	8	8	—
Glasford,	...	...	4	4	—
Stonehouse,	...	...	16	16	—
Blantyre,	...	...	227	208	19
Bothwell,	...	...	369	332	37
Cambuslang,	...	...	158	143	15
Cambusnethan,	...	...	46	44	2
Dalserf,	...	...	282	271	11
Dalziel,	...	...	1	1	—
Hamilton,	...	...	39	34	5
New Monkland,	...	...	69	62	7
Old Monkland,	...	...	529	494	35
Shotts,	...	...	299	272	27
Total,	...		<u>2,059</u>	<u>1,901</u>	<u>158</u>

Applications by Landlords.—Ten applications were received from owners of houses, in respect of which certificates had previously been granted to the tenants requesting reports of the Local Authority to the effect that the houses were now in a reasonable state of repair. The Committee granted certificates in seven cases and refused three.

Ruinous Buildings.

The following ruinous or dangerous buildings were dealt with during the period under review, in terms of Section 191 of the Burgh Police (Scotland) Act, 1892, as applied to the County by Section 10 (2) of the Local Government (Scotland) Act, 1908 :—

Cleland.—The 21 dwellings known as Pottery Buildings, Cleland, referred to on page 319 of last Annual Report, were further affected during the year by mineral operations, and as a consequence five of the houses were vacated. Meantime the owners are taking precautions, where necessary, to prevent accidents.

Shotts.—Notices were served on the owner of properties at 100 Shotts Kirk Road and 25-35 Rosehall Road, Shotts, in connection with the dangerous condition of chimney-heads, and in each case the necessary repair work was duly carried out. A notice was served on the owner of 2 single-apartment dwellings at 1 and 3 Knowehead, Stane, regarding the dilapidated and dangerous condition of the property. Notices were also served on the occupiers, who later removed, and the buildings were subsequently demolished.

Blantyre.—An old one-storey building at 7 Douglas Street, High Blantyre, was found to be in a dangerous condition, the gable wall being about two feet off the plumb, and a portion of the roof rafters hanging inside the building. A notice was served on the owners, who caused the offending gable to be demolished.

At 10 Alpine Street, Blantyre, the stairs and landing giving access to six dwellings were found to be in a ruinous state and dangerous to passengers. After service of a notice the owner had the necessary repair work executed.

Bellshill.—An unoccupied two-apartment house at 2 Old Orbiston Rows, Bellshill, was reported as being in a ruinous condition, and, after a notice had been served on the owners, the dangerous portion of the buildings was demolished.

Larkhall.—The chimney-head and gable wall of a building at 16 Lower Avon Street, Larkhall, were badly affected during a storm and found to be in a dangerous condition. On the matter being brought to the notice of the owner the work of repair was duly carried out.

South Biggar Road, Airdrie.—The front boundary wall of a house known as Oakland, South Biggar Road, Airdrie, was found to be in a ruinous state and dangerous to passengers. The wall was duly repaired after service of a notice on the owner.

Stonehouse.—A wash-house chimney-head situated at the rear of property at 42 King Street, Stonehouse, was reported to be in a dangerous state, and after service of a notice the owner had the necessary repairs carried out.

Drainage.

There are now 25 Special Drainage Districts in the Middle Ward Area, a new district to include the village of Glenboig, so far as within the Middle Ward District, having been formed on 29th July.

New Sewers.—The following information was supplied by the District Engineer as to sewers constructed during the year :—

General Public Health.—

Sewer from Meikle Earnock to Low Waters,

Hamilton,	...	...	...	...	112 yards, 9-inch.
					528 „ 12 „
					336 „ 15 „

The number of connections made to sewers during the year was 260.

SEWAGE PURIFICATION WORKS.

Busby.—The material has been removed and renewed in two of the contact beds.

East Kilbride.—An additional sewage tank and auxiliary works have been constructed.

Stonehouse.—A complete installation of sewage purification works, consisting of tanks and percolating filters, has been completed.

Overtown.—A complete installation of sewage purification works, consisting of tanks and percolating filters, has been completed.

HOUSING SCHEMES.

Sewers.

				Lineal Yards.			
				9"	12"	15"	18"
Auchinraith, Blantyre, -	-	-	-	530	—	—	—
Orbiston No. 1, Bellshill, -	-	-	-	586	250	485	—
Do. 2, do., -	-	-	-	568	—	—	—
Glenburn, Carfin, -	-	-	-	100	—	—	—
Holytown No. 2, Holytown, -	-	-	-	170	—	62	—
Muiredge, Uddingston, -	-	-	-	412	—	30	—
Overtown Road, Cambuslang, -	-	-	-	656	272	340	112
Waterloo No. 2, Overtown, -	-	-	-	407	—	—	—
Do. 3, do., -	-	-	-	160	—	—	—
Ashgillhead No. 3, Larkhall, -	-	-	-	189	—	—	—
Strutherhill, Larkhall, -	-	-	-	519	478	468	—
Busby, East Kilbride, -	-	-	-	394	—	—	—
Allanton, Ferniegair, -	-	-	-	429	158	—	—
Braid Road, Carmyle, -	-	-	-	292	190	111	—
Caldercruix No. 2, Caldercruix, -	-	-	-	300	182	—	—
Muirhead, Harthill, -	-	-	-	360	240	—	—
Newfield Road, Stonehouse, -	-	-	-	422	—	—	—
Totals, -	-	-	-	6,494	1,770	1,496	112

SEWAGE PURIFICATION WORKS.

Ferniegair.—A complete installation of sewage purification works, consisting of tank and percolating filters, has been constructed to deal with the sewage from the Allanton Housing Site at Ferniegair.

Overtown.—A system of sewers for the greater part of the village of Overtown, referred to on page 320 of last Annual Report, has been laid, and sewage purification works are in operation. Pending the formation of a Special Drainage District, the Committee decided to permit connections to be made to the new sewers by owners of properties desiring so to connect on their undertaking to pay the District Committee a charge for drainage in respect of their properties equivalent to a rate of 2s. per £ on the assessable value of the properties. During the year several connections to the new sewers were made on the Committee's terms.

Glenboig.—The question of the formation of a Special Drainage District to include the village of Glenboig, referred to on page 321 of last Annual Report, was again under consideration by the Committee, and on 29th July they agreed that a Special District to include Glenboig (so far as within the Middle Ward District) be formed.

Holytown.—Complaints were received as to alleged nuisance conditions arising from the ditch or watercourse near the Level Crossing at Holytown Station. A statement on the matter was submitted to the Committee showing that the only means of dealing satisfactorily with the complaint was by the construction of complete sewage purification works, and that this was being dealt with in the special report, which was in course of preparation, dealing with drainage facilities for areas outwith Special Drainage Districts.

Glenmavis.—Referred to on page 321 of last Annual Report. In connection with a nuisance complaint regarding the foul condition of the ditch in a wood at the south end of the village of Glenmavis, the question of the provision by the Committee of a sewerage system was raised by the superior of the ground. The ditch referred to receives sewage from the houses on the east side of the Airdrie Road, and in designing the outfall sewer for the Glenmavis Housing Site provision had been made for taking the drainage which was discharged into the ditch, but the sewage purification works then under construction had been designed for treating the sewage from the Housing Site only. Presently there was no Special Drainage District at Glenmavis but it was included in the list of areas which the Committee were considering in relation to drainage services.

Drainage Facilities Outwith Special Districts.—A report on the question of the provision of sewerage and sewage purification works for the following areas outwith Special Drainage Districts, arranged in order of urgency, was submitted to the Committee:—

- | | |
|-------------------------------|-------------------------------|
| 1. Bothwell Park. | 13. Salsburgh. |
| 2. Calderbank. | 14. Swinton, Easterhouse, &c. |
| 3. Glenboig. | 15. Greengairs. |
| 4. Ferniegair. | 16. Netherburn. |
| 5. Meikle Earnock, &c. | 17. Birkenshaw. |
| 6. Harthill and Eastfield. | 18. Bellside, &c., Cleland. |
| 7. Waterloo and Gillhead. | 19. Glenmavis. |
| 8. Caldercruix and Glengowan. | 20. Plains. |
| 9. Newarthill. | 21. Chapel and Morningside. |
| 10. Ashgill. | 22. Auchentibber. |
| 11. Glassford. | 23. Chapelton. |
| 12. Quarter. | |

As the scheme is of great importance and involves a large expenditure, it was still being considered at the close of the year.

Foul Ditches.—Arising out of the foregoing, and as a temporary expedient towards improving the existing conditions in certain of the areas under consideration, the authority of the Committee was given to engage such temporary assistance as might be found necessary, from time to time, for the cleaning out of ditches into which sewage is discharged. In this connection a survey of the District was made regarding ditches and streams into which sewage matter was discharged, and the polluted portions of these ditches and streams were cleaned out.

Water Supply.

The water supply from the various reservoirs belonging to the Middle Ward District Committee was more than sufficient to meet all demands. Complaints were received as to local deficiencies, but these were mostly found to be due to deficient service pipes, and on being brought to the notice of the respective owners were remedied in every instance.

The following is a note, prepared by the Water Engineer, showing the extensions of water pipes carried out during the year.—

		Lineal Yards.				
		2"	3"	4"	6"	12"
Newarthill Housing,	- - -	—	150	—	—	—
Muredge Housing,	- - -	—	450	—	—	—
Waterloo Housing, No. 2,	- - -	—	350	390	—	—
Do. No. 3,	- - -	—	120	—	—	—
Gilmourton and Ryelands,	- - -	200	2,870	—	—	—
Overton Road Housing,	- - -	—	520	250	500	—
Orbiston Housing,	- - -	—	500	—	—	—
Road Widening, Uddingston,	- - -	—	—	200	165	—
Eastfield Housing, Harthill,	- - -	—	—	640	—	—
Auchenraith Housing,	- - -	—	500	—	—	—
Strutherhill Housing,	- - -	—	610	—	—	—
Cameron Cottage, New Monkland,	- - -	160	—	—	—	—
Ryelands Creamery,	- - -	—	90	—	—	—
Ashgillhead Housing,	- - -	—	180	—	660	—
Northfield Colliery,	- - -	—	150	—	—	—
Chapelhall Housing,	- - -	—	150	—	—	—
Westertonhill, Bonkle,	- - -	400	—	—	—	—
Fishescoats Housing,	- - -	—	550	—	—	—
Kirkhill Road, Wishaw,	- - -	240	—	—	—	—
Fallside Housing,	- - -	—	—	500	420	—
Windlaw Road, Carmunnock,	- - -	—	200	—	—	—
Kingshill Housing,	- - -	—	—	—	700	—
Garngibbock, New Monkland,	- - -	250	—	—	—	—
Chapelhall to Petersburn,	- - -	—	—	—	—	1,710
Total,	- - -	1,250	7,390	1,980	2,445	1,710

Water Samples.—Owing to complaints made regarding the quality of water supplies from private sources samples were obtained from the following places and submitted for chemical analyses :—Roughazie Farm, Strathaven; Headhouse Farm, East Kilbride; Philipshill, Busby; Torrance Lodge, East Kilbride; Hazeldean Farm, Stonehouse (2); Over Tweedieside Farm, Stonehouse; Low Kittymuir Farm, Stonehouse; Stanebent Farm, Shotts; Harthill Mains Farm, Harthill; and Rosemount and Sunnyside, Dura (2).

Roughazie Farm, Strathaven.—The chemical analysis of a water sample procured at this farm afforded no evidence of pollution.

Headhouse Farm, East Kilbride.—A sample of water from a stream at this farm, proposed to be utilised as a domestic supply, was submitted for analysis. At the time the sample was taken the stream was running high owing to a heavy rainfall, and as a consequence the water was very unsatisfactory. The analysis showed, however, that if a proper filter were introduced, and received regular attention, the water would be quite suitable for domestic purposes. Part of the stream was fenced off and an additional storage tank and filter provided.

Philipshill, Busby.—In connection with the proposed erection of a new dwelling-house at Philipshill, a sample of water from a spring to be used as a water supply was submitted for analysis, which proved the water to be liable to pollution, and therefore unsuitable for domestic purposes. The plans for the erection of the dwelling were withdrawn.

Torrance Lodge, East Kilbride.—As the result of a complaint by the tenant of this house a sample of water from the courtyard pump was submitted for analysis, which negatived the suggestion of sewage pollution.

Hazeldean Farm, Stonehouse.—Two samples of water taken from a pump and adjoining well were analysed, and while the water from the pump afforded no evidence of organic contamination, the well water was found to be grossly polluted. Dairying has since been given up at this farm.

Over Tweedieside Farm, Stonehouse.—The analysis of a water sample procured from this farm showed no evidence of organic contamination.

Low Kittymuir Farm, Stonehouse.—No satisfactory source of water supply being obtainable at this farm, referred to on page 323 of last Annual Report, and the premises being otherwise unsuitable, registration by the Local Authority under the Milk and Dairies Act was refused, and the entire dairy stock has been disposed of.

Stanebent Farm, Shotts.—From an underground storage tank at this farm a sample of water taken for analysis was reported as unsuitable for domestic purposes. Negotiations with the owner resulted in a gravitation supply being introduced.

Harthill Mains Farm, Harthill.—A sample of water drawn from a deep well on this dairy farm was found on analysis to be unfit for domestic purposes. The question of the provision of a proper supply of wholesome water was taken up with the owners, and the matter has not yet been disposed of.

Dura, by Newmains.—Plans were submitted of a house proposed to be erected at Rosemount, Dura, and it was intended that the water from a stone-built well existing on the ground should be utilised for domestic purposes. A sample of this water was obtained for analysis, and proved unsuitable for domestic purposes. As an alternative the owner suggested that the water from another well situated some 250 yards from his feu might be used, but here again the results of analysis were unsatisfactory. The Local Authority accordingly could not competently sanction the building of a dwelling-house in such circumstances, and refused to pass the plans.

Newark Farm, Glasford.—Registration under the Milk and Dairies Act having been refused the occupier of this dairy farm on account of unsatisfactory water supply and defective premises, referred to on page 323 of last Annual Report, he gave up business and removed.

Kilgarth Farm, Coatbridge.—The question of a wholesome water supply for this dairy farm, referred to on page 323 of last Annual Report, is in abeyance, as the occupier removed from the premises, which are not now used for dairying purposes.

Scavenging.

There are still 25 Special Scavenging Districts within the Middle Ward Area, no new districts being formed during the year. The boundaries of the following special scavenging districts were extended, viz.:—Bellshill and Mossend; Shotts and Dykehead, on 25th March; and Holytown, New Stevenston, and Carfin, on 27th May.

AITKENHEAD, TANNOCNCHSIDE, AND BOTHWELLPARK. — The work of collection and disposal of the refuse within this special district was carried out by a contractor in a satisfactory manner, the refuse being deposited in Fallside Coup.

BAILLIESTON. — The daily collection and removal of refuse was carried out satisfactorily by the staff employed by the Local Authority, most of the refuse being deposited in coups and the remainder on farm lands. The raising of the waterlogged field at Rhindsmuir Farm, reported in last Annual Report, was completed, and the farmer harvested a good crop of oats from the reclaimed land. Another coup has been secured for the winter months at Rhinsdale sand-pit, where the same procedure as at Rhindsmuir Farm will be followed. The work of emptying the ash-pits at West Marystone was satisfactorily undertaken by a contractor.

Common Stairs, &c.—Eleven notices, in terms of Section 117 of the Burgh Police Act, 1892, were served on property owners requiring them to whitewash, or, at their option, to paint, the walls and roofs of common passages at their respective properties, and in every instance the necessary work was executed.

BELLSHILL AND MOSSEND. — The daily collection and removal of refuse is carried out under the direct control of a local Sub-Committee of Management, who have a superintendent and staff in their own employment. The refuse is deposited in a coup.

Common Stairs, &c.—Notices were served on thirty-two owners of property requiring the whitewashing or painting of common passages and staircases, and in each case the work was carried out.

Extension of Boundaries. — The boundaries of the Special Scavenging District were enlarged during the year to include the District Committee's Housing Sites in North Road and at Orbiston.

BLANTYRE. — The work of scavenging continues to be done satisfactorily by a contractor, under the direct control of the local Sub-Committee of Management and supervised by their superintendent. All refuse is deposited in the public park, and used for levelling purposes.

Common Stairs, &c.—Twelve notices were served on owners requiring the whitewashing of common passages and staircases, and in every instance the work was duly executed. Two notices, in terms of Section 115 of the Burgh Police Act, 1892, were served on occupiers

who had failed to sweep and wash regularly the common passage giving access to their premises, determining the rotation to be observed by them in future in such sweeping and washing, and intimating that, in the event of their failure to comply with the requirements thereof, proceedings would be taken against them. Sweeping and washing have since been regularly carried out.

BOTHWELL.—The daily collection and removal of refuse continues to be carried out in a satisfactory manner by a staff in the direct employment of the Sub-Committee of Management.

The contractor engaged during the winter months to collect and remove the contents of the ashbins three times weekly from the Housing Schemes also gave every satisfaction. All refuse matter is deposited in Fallside Coup.

Common Stairs, &c.—Two notices to whitewash or paint common passages and staircases were served, and the necessary work was carried out in each case. Two notices were also served on occupiers who had failed to keep clean the common passage giving access to their premises, and after being threatened with Court proceedings sweeping and washing were commenced in rotation, and have since been regularly attended to.

BUSBY.—The refuse collection in this special district was carried out satisfactorily by a contractor, all refuse being deposited in Busby Glen Coup.

CALDERBANK.—The collection and removal of refuse in this special district continues to be satisfactorily carried out by a contractor, all refuse being used on farm lands. As stated in last Annual Report, the lack of drainage facilities still hinders the provision of water-closet accommodation, and during the year only one privymidden was abolished.

CAMBUSLANG.—The refuse is collected and removed daily by a contractor, and disposed of at Cambuslang Destructor.

Common Stairs, &c.—Notices to whitewash or paint common passages and staircases were served in twenty-six instances, and the necessary work was duly carried out in each case.

CARMYLE AND MOUNT VERNON.—The staff employed by the Local Authority continue to carry out the work of scavenging in this special district in a satisfactory manner, the refuse being disposed of on farm lands and in coups.

The ground on which Foxley Coup was situated having been taken over by the City Authority, the tipping of refuse there was discontinued in May. Arrangements were made with the tenant of Kenmuir sand-pit, Mount Vernon, for the use, as a refuse dump, of a wrought-out portion of the sand-pit, and the bulk of the refuse is now deposited there.

Common Stairs, &c.—In twelve instances notices were served on owners requiring them to whitewash the walls and roofs of common passages and staircases, and the work in every case was duly carried out.

CLELAND AND OMOA.—The refuse in this special district was collected and removed to farm lands by a contractor. Two privy-middens were abolished during the year.

Common Stairs, &c.—Four notices were served on occupiers requiring them to sweep and wash in weekly rotation the common passage giving access to their dwellings, and the necessary work has since been regularly carried out.

DALZELL AND NETHERTON.—The scavenging in this special district continues to be done satisfactorily by the staff in the direct employment of the Committee, the refuse being collected daily and deposited in coups. Part of the time of the staff is devoted to the Hamilton Road Special Scavenging District.

EAST KILBRIDE.—The collection and removal of refuse was undertaken satisfactorily by a contractor, all refuse being deposited in a coup.

GARTLEA.—The refuse in this special district is collected weekly by a contractor and deposited in a coup. The work was done in a satisfactory manner.

GLENGOWAN AND CALDERCRUIX. — The scavenging of this special district is undertaken by a farmer contractor, who deposits the refuse on his own lands, about two miles distant. The collection is chiefly from privy-middens, and the work was done in a satisfactory manner.

HAMILTON ROAD. — The refuse collection was undertaken by the staff employed in the Dalzell and Netherton district, and executed in an efficient manner.

HOLYTOWN, NEW STEVENSTON, AND CARFIN.—The daily collection and removal of refuse, which is mostly incinerated at New Stevenston Destructor, continues to be done by a staff in the direct employment of the Local Authority in a satisfactory manner. The ashpits at Legbrannock are emptied weekly, and the refuse disposed of on farm lands by a contractor.

Extension of Boundaries.—During the period under review the boundaries of the Special Scavenging District were enlarged to include the District Committee's Housing Site at Holytown and a small area at Woodside Street, New Stevenston.

LARKHALL.—The daily collection and removal of refuse was carried out efficiently by a staff in the direct employment of the Committee, the refuse being mostly disposed of at Larkhall Destructor. The contents of a number of privy-middens at Strutherhill are disposed of on farm lands.

Common Stairs, &c.—One notice was served on an owner requiring the whitewashing of the walls and roof of a common passage, and the work was duly carried out. Notices were also served on four occupiers, in terms of Section 115 of the Burgh Police Act, 1892, and sweeping and washing have since been regularly attended to.

NEWARTHILL.—The collection and removal of refuse to farm lands was carried out by a contractor, the contents of ashbins being collected twice weekly, and ashpits emptied whenever there is a cart-load, or at least once a month. Much difficulty was experienced in keeping the contractor to the terms of his contract during the first part of the year, but the new contractor, so far, has given every satisfaction.

NEWMAINS.—The collection and removal daily of refuse in this special district was carried out in an efficient manner by a contractor, the material being deposited in coups.

SALSBURGH.—The refuse was collected and disposed of on farm lands by a contractor, who carried out the work in a satisfactory manner.

SHOTTS AND DYKEHEAD.—The work of scavenging continues to be done in an efficient manner by a staff in the direct employment of the Committee, most of the refuse being deposited in coups, and the remainder on farm lands. During the year thirty-two privy-middens were abolished.

Extension of Boundaries.—During the year the boundaries of the Special Scavenging District were extended to include the District Committee's Housing Schemes at Hillhouse-ridge, Torbothie, and Springhill, also the Second Scottish National Housing Company's Scheme at Torbothie.

STONEHOUSE.—The collection and removal of refuse was carried out satisfactorily by a contractor, all material being deposited in a coup.

Common Stairs, &c.—A notice was served on a property owner requiring him to whitewash or paint the walls and roof of a common passage, and the work was duly executed.

STRATHAVEN.—The collection and removal of refuse was undertaken by a contractor, all refuse being deposited in a coup.

UDDINGSTON.—The refuse within this special district was collected daily and deposited in Fallside Coup by a contractor in a satisfactory manner.

Common Stairs, &c.—Twenty-nine notices were served on owners of property requiring the whitewashing or painting of common passages and staircases, and in each case the work was carried out.

WATERLOO AND OVERTOWN.—The scavenging of this special district is undertaken by a contractor, the refuse from ashbins and earth-closets being collected twice weekly, and the contents of ashpits removed at least once a month, all material being disposed of on farm lands and in coups. Difficulty was experienced with the contractor during the first part of the year, and as a consequence, in failing to implement the terms of contract, payments were held back until the ashpits reported to the then contractor as requiring attention were cleaned out. On the new contractor taking over, a decided improvement was effected.

HOUSING SCHEMES. — The collection and removal of refuse twice weekly from the dwellings at the following Housing Schemes still outwith Special Scavenging Districts was carried out by contractors under the supervision of the local Sanitary Inspectors, viz. :—Ashgill-head, Broomhouse, Carnbroe, Chapelhall, Drumpark, Eastfield, Ferniegair, Greengairs, Kingshill, Meikle Earnock, and Westeraigs.

PROVISION OF DUSTBINS. — During the year notices, in terms of Section 23 of the Burgh Police Act, 1903, were served on numerous owners of property within the Special Scavenging Districts requiring

them to provide proper covered receptacles. In most cases suitable dustbins were provided after service of the notices, and the remainder were reported to the Committee, with a view to proceedings, in terms of Section 24 of the Act, being instituted. Legal proceedings were found necessary in three instances, viz.:—392 Main Street, Bells-hill; Reform Place, Mossend; and Sarahville Crescent, Larkhall. In the first two cases each respondent was fined 30s., and in the remaining case a fine of 20s was imposed.

WATER-CLOSETS.—The following statement shows the number of privies which existed in Special Scavenging Districts prior to the formation of same, also the number since abolished, and water-closet accommodation provided in lieu:—

District.	Privies.	Abolished.	District.	Privies.	Abolished.
Aitkenhead, &c.,	87	21	Hamilton Road,	—	—
Baillieston, -	145	104	Holytown, &c., -	185	157
Bellshill, &c., -	382	380	Larkhall, -	868	856
Blantyre, -	251	251	Newarthill, -	112	19
Bothwell, -	100	99	Newmains, -	246	246
Busby, -	—	—	Salsburgh, -	56	22
Calderbank, -	75	1	Shotts, &c., -	717	579
Cambuslang, -	212	212	Stonehouse, -	180	157
Carmyle, &c., -	50	36	Strathaven, -	460	460
Cleland, &c., -	260	115	Uddingston, -	102	102
Dalzell, &c., -	30	22	Waterloo, &c., -	169	6
East Kilbride, -	34	34			
Gartlea, -	4	3	Total, -	4,817	3,884
Glengowan, &c.,	92	2			

Private Streets.

LARKHALL.—A Sub-Committee of the District Committee met in June with the feuars in *Academy and Victoria Streets, Larkhall*, referred to on page 328 of last Annual Report, on the subject of the repair or making up of these streets. After a general expression of views the feuars present were all agreed that the proposal for the making up of the streets should be adhered to, and the work commenced as soon as possible. It was accordingly decided that the feuars present who had not paid their shares of the estimated cost should make an effort to do so with the least possible delay, and that they should also endeavour to persuade the other feuars to pay their contributions. The total estimated cost of making up the streets was £893 1s. 11d., and only 11 of the 29 feuars concerned lodged a total sum of £355 3s., leaving a balance of £537 18s. 11d. outstanding. No further sums having been received from the feuars, towards the

close of the year the District Committee agreed that the unsatisfactory condition of the streets would not warrant further delay in dealing with the matter, and decided that, failing the necessary sums being forthcoming in connection with the proposal for the making up of the streets within one month, the sums lodged by certain of the feuars should be returned to those feuars, and steps immediately taken for the statutory repair of the streets.

Claude Street.—Further negotiations took place with feuars in this street, referred to on page 329 of last Annual Report, and in connection with the proposal for the making up of the street the Lanarkshire Education Authority, one of the feuars, intimated that it was the intention of the Authority to proceed in the course of the year with the erection of an annexe to the Larkhall Academy, and suggested that, in view of the extraordinary traffic which would be occasioned thereby, the operations on the street should be delayed until the completion of the new school building. In the circumstances the question of the making up of the street has been continued.

Crossgates Street, referred to on page 329 of last Annual Report. A Sub-Committee met with the feuars in this private street, when one of the largest feuars desired that the street should be made up to the highway standard. The other feuars, however, suggested that, having regard to the fact that the street was a *cul-de-sac*, and there was not a great deal of traffic on same, only the minimum amount of repairs should be carried out. It was ultimately agreed that the feuars should themselves arrange to put the street into a satisfactory condition, and the work of repair was duly carried out.

UDDINGSTON. — A complaint was made as to the unsatisfactory condition of the surface of a lane adjoining *Old Mill Road, Uddingston*, and after negotiations with the parties concerned the cause of complaint was removed.

BAILLIESTON.—*Maxwell Street, Baillieston*, was reported as being in a soft and miry condition, and negotiations are proceeding with the various feuars with a view to the satisfactory repair of the street.

CALDERBANK.—The attention of the feuars in *Loch Street, Calderbank*, was directed to the unsatisfactory state of the street, with the result that certain repair work was done to the surface.

Nuisances.

During the year 82,775 inspections were made for the detection of nuisances, and the number of nuisances recorded was 2,304, the chief being choked drains, sinks, and water-closets. A considerable number of such chokages are caused by carelessness on the part of tenants, and both verbal and written cautions have been administered to many delinquents.

Intimations were issued to authors of nuisances in 1,750 cases, and in many instances the cause of complaint was immediately removed. Where the intimations had no attention Statutory Notices were served, and these numbered 266.

Prosecutions.—Legal proceedings were taken in two instances, viz.:—137 Shotts Kirk Road, Shotts—overcrowding; and Miller's Land, Wattstown—leaky roof. In the first case the respondent was fined 20s. and ordained to remove from his dwelling within fourteen days but, as he failed to do so, a Petition was made for penalties under Section 24 of the Public Health (Scotland) Act. On the day preceding the hearing of the diet the defender removed from the dwelling, and in the circumstances the Sheriff imposed a modified penalty of 26s. In the second case the respondent was fined in £5 5s. expenses.

Unfenced Shafts.—Forty-six disused mine shafts were found to be in a dangerous condition, and dealt with by the Department. These were situated as follows:—Knowetop Nos. 1 and 2, Plains; Thrashbush No. 2, Rawyards; Dykehead No. 3, Airdrie; Bog, Larkhall; Home Farm, Hamilton; Parkside and Pickerstonhill, Newarthill; Jerviston, Motherwell; Chapel Square, Morningside; Hartrigg Nos. 1 and 2, Hartwood; Stanrigg No. 2 and No. 3 Arbuckle, Whiterigg; Calder Nos. 1 and 2, Calderbank; Rigghead No. 2, Airdrie; Woodrigg Nos. 1 and 2, Riggend; Cairnhill No. 2, Old Monkland; Chapel Square No. 2, Morningside; Whiterigg No. 4, Whiterigg; Braes, Greengairs; Fairybank No. 1, Newhouse; Drumgray, Airdrie; Kirkwood, Coatbridge; Meadowfield, Longriggend; Warnix, Darnagavil; Whiterigg (Splint), Airdrie; Bankhead, Glasford; High Darnagavil, Darnagavil; Arbuckle No. 1, Whiterigg; Burnhill No. 5, Newarthill; Howmuir, Cleland; Badallan No. 2, Fauldhouse; Coltswood Nos. 2 and 3, Gunnie No. 4, and Papperthills, Coatbridge; Loch No. 1, Coatbridge; Berryhill No. 2, Riggend; Dykehead No. 2, Airdrie; Berryhill, Airdrie; Bankhead No. 1, Clarkston; Dykehead, Airdrie; and Cathburn, Morningside.

Corporation Coups.—Further complaints were received during the year regarding the condition of the Glasgow Corporation refuse coups situated at Penwinnie, Maryburgh, and Braidenhill, New Monkland, referred to on page 330 of last Annual Report. At Penwinnie, owing to light refuse burning, the atmosphere of the surrounding district was grossly polluted, and, after negotiations with the City Authority, a portion of the coup was abandoned and a new siding laid on the farm lands, with satisfactory results. The coup at Maryburgh was found to be burning along the greater length of the north face, and also contributing to the pollution of the neighbourhood, while at Braidenhill the coup, although burning, was only emitting slight smoke. At the latter coup tipping has been discontinued, and the whole of the rails on the siding have been lifted. It is anticipated that when the additional refuse destructor works at present under construction elsewhere by the Corporation are completed the nuisance conditions at these coups will be removed. Meantime the City Authority will be pressed to deal more effectively with the existing offensive conditions.

Coatbridge Burgh Coup.—A petition was received, signed by 14 parties, representing the feuars and tenants of Townhead Road, Gartsherrie, making a complaint regarding the “disposal of Coatbridge Burgh refuse at Espieside, thereby creating an offence to the other feuars and tenants,” and stating that the lodging of the refuse was approximately 100 yards from some of the dwellings. An inspection of the *locus* was made in company with the County Medical Officer and the Burgh Sanitary Inspector, when it was found that refuse was being tipped on low-lying ground belonging to the Burgh Authority situated between the south side of Townhead Road and Drumpellier Public Park, the intention being to bring the surface up to the level of the access road from the public highway. About 80 carts of refuse per day were being dumped on a working face about 30 feet wide by 15 feet high and distant about 170 yards from the nearest dwelling of the complainers, on the south side of Townhead Road. The refuse was soiled over as tipping proceeded and grass seed sown, and on the old portion of the dump there was already a fair growth of grass. A wire-netting fence about 6 feet high enclosed the tipping face to prevent any loose papers being blown about, and a watchman was constantly in attendance, with a view to avoiding any outbreak of fire. It was explained that it had been the practice to cover the tipping face with tarpaulin sheets at

the close of each day's work, but that recently the tip had been maliciously set on fire and the covers destroyed. The fire had been put out, but at the time of inspection there was evidence of vapour and some fumes. These, however, were imperceptible unless one was close to the tip. At the time of visit nothing was found that would warrant action being taken by the Department, and on subsequent inspections this was confirmed.

Burning Bing, Clapperhowe.—A letter having been received from the Town-Clerk, Motherwell, stating that repeated complaints had been made by householders in the neighbourhood of Cleekhimin of objectionable fumes caused by a burning bing at Clapperhowe, near Coursington Bridge, Motherwell, partly within the Burgh of Motherwell, and partly within the Middle Ward District, a Sub-Committee of the District Committee met on the ground with representatives from the Town Council and representatives of David Colville & Sons, Limited, with regard to the complaints. An inspection of the bing was made, when it was found that for the greater part of its area the bing was burning and emitting considerable smoke and fumes. The representatives of Messrs. Colville explained that the bing had been set on fire some time ago by trespassers, and that the combustion had obtained such a hold on the bing that they were quite unable to suggest any steps which could be taken to control it or put it out. They would, however, favourably consider any practicable means which might be suggested for remedying or improving the situation, and pointed out that they had endeavoured to prevent the burnings spreading further west by cutting a trench across the bing and infilling with sand, and they hoped that the action would be successful. At the close of the year the bing was still smouldering.

Burning Bings, North Road, Bellshill.—The refuse heap adjoining the North Road, Bellshill, and the bing at No. 13 Pit, Rosehall Colliery, have been the subjects of correspondence with the parties concerned. They were still under observation at the close of the year.

Bellshill Laundry.—As the result of observations a notice was served on the owner of Bellshill Laundry calling upon him to discontinue a nuisance caused by the emission of black smoke. Subsequently a complaint was received in connection with the matter from a neighbouring proprietor. The owner of the laundry has since been experimenting with new fuel, and the nuisance has become less acute. Observations are still being made.

Millside, Bothwell.—A complaint was received as to nuisance conditions arising from a factory chimney in the neighbourhood. It was alleged that black smoke was emitted in such quantity as to be a nuisance, and observations were made, which confirmed the complaint. On the factory owner's attention being directed to the matter he caused the chimney to be heightened, since when no further complaint has been made.

Myers Burn, Uddingston.—The owner of a house in the vicinity of this burn complained as to the alleged nuisance caused by the discharge into the burn of liquid residue from the Uddingston Gas Works. Inspections were made from time to time, and on no occasion were nuisance conditions found. The circumstances were reported to the Committee, and the complainer informed that there was no ground for action on the part of the Local Authority.

Second-hand Clothes Hawkers.—In the course of routine inspections during the year it was observed that many female hawkers from Glasgow frequent certain districts of the Middle Ward Area for the purpose of selling second-hand wearing apparel, including underclothing. The articles are carried in "packs," and openly displayed in the various backcourts of tenement properties. Inspections of the packs revealed that the articles of clothing are very often soiled and filthy, and as their origin is unknown they may be a potential source of danger to the purchasers, if not to the community.

Cinemas.

All the cinemas within the District were regularly inspected during the year, and, with a few exceptions, the standard of cleanliness was found to be good.

Ventilation.—On a visit to the Strathaven Public Hall during a cinema performance it was observed that the outlet ventilation of the hall was not acting in a satisfactory manner, smoke being so dense in the hall that it could be seen coming out at the entrance doors. On the janitor's attention being directed the matter was promptly attended to.

Fire Appliances.—During an inspection of Baillieston Pavilion the precautionary measures against fire were found to be deficient, and the matter was brought to the notice of the Licensing Authority. Legal proceedings followed, and the lessee was convicted and fined £2. The matter has now been remedied.

Public Conveyances.

During the year 2,310 inspections of public conveyances were made, and, although several bus owners were dealt with for failing to keep their vehicles in a clean condition the general standard of cleanliness was found to be good.

Workshops.

The number of workshops on the register at the beginning of the year was 326. Since then 11 have been added thereto and 23 removed therefrom, leaving 314 at the close of the year.

During the year only one notice was received from H.M. Inspector of Factories of a person beginning to occupy a workshop. The premises were duly inspected, measured, and the occupier supplied with a card showing the capacity of the room and the number of employees permissible.

The inspections made numbered 744, and six notices were received from the Inspector of Factories regarding insanitary conditions in workshops. The matters complained of—six dirty bakehouses—were taken up and dealt with by the Sanitary Staff. The Department also dealt with other eleven dirty bakehouses, two dirty water-closets, one dirty cloakroom, broken plasterwork, and a drain opening inside a bakehouse, found in the course of our routine inspections.

Two lists, containing six outworkers, under Section 107 of the Factory and Workshop Act, were received from the City of Glasgow Authority. Inspections were made of all the premises, and these were found in a satisfactory condition.

The following table gives the handicrafts carried on in the various workshops:—

HANDICRAFTS.

Dressmaker, - - -	20	Plumber, - - -	11
Tailor, - - -	57	Cartwright, - - -	1
Milliner, - - -	9	Photographer, - - -	1
Baker, - - -	99	Motor Repairer, - - -	4
Shoemaker, - - -	45	Hosier, - - -	4
Saddler, - - -	6	Coachbuilder, - - -	3
Blacksmith, - - -	21	French Polisher, - - -	1
Joiner, - - -	14	Confectioner, - - -	2
Cabinetmaker, - - -	4	Underclothing, - - -	1
Silk Weaver, - - -	1		
Moss Litter Work, - - -	1	Total,	314
Watchmaker, - - -	9		

Bakehouses Welfare Order, 1927.—This Order, made by the Secretary of State under Section 7 (1) of the Police, Factories, &c. (Miscellaneous Provisions) Act, 1916, for securing the welfare of the Workers employed in bakehouses, came into force on 1st May, and, in connection with the requirements thereof, the following cases were reported by the Sanitary Staff, viz. :—No washing facilities, 10; no cloakroom and drying accommodation, 5; and “Drinking Water” not marked, 2. These defects were brought to the notice of the various occupiers with satisfactory results.

Public Schools.

The various public schools were inspected throughout the year, and several matters requiring attention were brought to the notice of the Education Authority.

Strathaven.—Complaint was made regarding the insanitary condition of the lavatories at Crosshill School, Strathaven, and on the matter being referred to the Education Authority they replied that it was intended to discontinue the use of this school when the necessary extensions were made to the Academy.

Uddingston.—The conditions at St. John’s R.C. School, Uddingston, referred to in previous Annual Reports, remain unchanged.

Mossend.—An old canteen at Messrs. Beardmore’s works has been utilised to alleviate the overcrowding at the R.C. School, Mossend, but the overcrowded conditions reported in previous Annual Reports at the school proper appear still to exist.

Cambuslang.—The drainage system at Newton Public School was found to be unsatisfactory, and certain minor alterations were carried out on the understanding that the school would be scrapped in the near future.

Glenboig.—The congested and insanitary conditions reported in last Annual Report, page 332, have been greatly improved by the erection of two new schools, one of which is for the use of R.C. pupils.

Tents and Vans.

In the course of the year 412 inspections were made, and, with certain exceptions, all the premises were found in a satisfactory condition. Of the cases dealt with under the Committee’s By-laws it was not found necessary to take proceedings, as the occupiers of the caravans cleared out of the district after service of an intimation.

Bellshill.—A caravan located at the Showground, Bellshill, was found to be overcrowded. The owner's attention was drawn to the matter, and he purchased a larger vehicle.

Glenboig.—In a tent near Glenboig were found residing a man, his wife, and five children, and the accommodation being totally inadequate, insanitary conditions arose. After negotiations the family found other satisfactory accommodation.

Summer Camp.—The summer camp at Lickpriveck, East Kilbride, was again occupied this year. There were 30 families in residence, and the population numbered 120. A new incinerator has been built in the hillside to enable the management to deal more effectively with the refuse from the camp. The sanitary services were again this year carried out in a very satisfactory manner.

Interments.

The bodies interred at the expense of the Local Authority during the year numbered 25, the deaths being due to various causes. Twenty-four of the bodies were claimed and one unclaimed, but no "sufficient person" undertook the burial.

In every case where application is made to the Local Authority for the interment of a dead body by relatives or others who allege that they are unable, on account of poverty, to bear the expense of the burial, it has been the practice for the Department to make careful enquiries into all the circumstances, particularly to ascertain whether the deceased person was insured in any benefit society, and in five cases the expenses of interment were afterwards recovered.

Common Lodging-Houses.

There were three common lodging-houses on the register at the beginning of the year, and all were granted renewal of registration. The number of visits of inspection made was 42, and the premises, with one exception, were found to be in a clean condition.

A large model lodging-house was reported as not having been limewashed at the prescribed period, but on the keeper's attention being drawn to the neglect the matter was immediately attended to.

Dairies, Cowsheds, and Milkshops.

1,636 visits of inspection were made by the Sanitary Staff to dairy premises, and in several instances structural defects were reported, and dealt with under the Local Authority's new By-laws.

As the result of complaints regarding dirty milk supplies, a number of special milking visits were made to certain dairy farms, and where conditions of milking were found to be unsatisfactory instructions were given to those concerned.

Several cowkeepers were dealt with for failing to keep their dairy animals properly cleaned and groomed, and in one instance the animals were found in a verminous condition, attributed by the owner to a "bought-in" cow.

It has been noticed, generally, that the smaller the business carried on by a producer less attention is paid to cleanliness of animals and byres and to the hygienic production and handling of milk. This may be ascribed to certain causes, such as the lack of sufficient servants through financial embarrassment, or the old and invariably structurally defective premises, which are difficult of cleansing. Nevertheless, during the year a great improvement has been effected throughout the whole District towards the production of a clean milk supply.

New Byres, &c.—The following plans were submitted and approved of during the year for improvements and alterations at dairy premises :—

Westpark, Strathaven,	New Byre.
Stoneside, Busby,	Do.
Waterfoot, Busby,	Do.
Greenhills, East Kilbride,	Do.
Priestfield, High Blantyre,	Do.
Eastfield, Caldercruix,	Do.
Yards, Stonehouse,	Reconstruction of byre.
East Parkhead, Bellshill,	Alterations to byre.
Carfin Byres, Carfin.	Do.
West Redmyre, Newmains,	Do.
Brackenhill, Hamilton,	Do.
Fortissat Mains, Shotts,	Do.
Inchneuk, Glenboig.	New milkhouse, &c.
Clive Street, Shotts,	Do.

Lighting and Ventilation of Byres.—The points on which a considerable number of dairy byres fall short of the requirements of the By-laws are lighting and ventilation, and in this connection numerous improvements were carried out during the year.

Drinking Bowls.—The introduction of automatic drinking bowls for dairy animals is on the increase,

Registration.—During the year 187 applications for registration were made, and, including the 39 applications still to be dealt with at the close of the preceding year, 162 received provisional registration, 13 were refused, 36 continued, and the remaining 15 were being dealt with at the close of the year. The number of businesses discontinued during the period under review was 27, leaving a total of 822 registered dairies, with an approximate number of 14,000 cows.

There are only a few exempted cowsheds in the Middle Ward Area, and on the whole the general conditions and cleanliness were found to be good.

Milk and Dairies (Scotland) Order, 1925.—The provisions of Articles 5 to 16 were strictly enforced, and several dairymen were dealt with during the year for failing to carry out the requirements of the Order.

Regular inspections were made of milk lorries in transit. In all cases where milk tins were found without seals verbal warning was given to the consignor, followed by a written warning. This procedure proved effective, as only in one instance was the offence repeated, and legal proceedings followed. The farmer pled guilty, and was fined 10s. or 5 days' imprisonment.

Bottled Milk.—A large increase in the sale of bottled milk was reported during the year, and delivery of milk in bottles is rapidly replacing the old method of cans. Although the present system of closing the bottles with pulp discs gives no guarantee of freedom from contamination between producer and consumer it is a step in the right direction, and denotes that a keener interest in modern requirements is being displayed by those concerned.

Confirmation of New By-laws.—In terms of Section 8 of the Milk and Dairies (Scotland) Act, 1914, the Scottish Board of Health, with the concurrence of the Board of Agriculture for Scotland, confirmed, on 3rd May, the By-laws made and enacted by the Local Authority at their meeting on the 30th April, 1926. Immediately after confirmation a copy of the By-laws was sent to each registered cowkeeper and dairyman in the Middle Ward Area, and to others who made application for a copy.

General.—As already reported, the structural and other conditions were so bad at certain dairy premises that cleanliness and clean methods were impossible. The Local Authority refused registration in these cases, and dairying had to cease.

The structural conditions at many other farms where registration was granted were unsatisfactory, and improvements will continue to be asked for until the whole have been brought into conformity with the By-laws.

Much of the opposition met with after the Milk and Dairies Act came into operation has disappeared, and, despite the opinions put forward by certain individuals on every possible occasion, that structures and equipment do not matter much and that clean milk can be produced in any existing byre, the producers have realised that the doctrine is fallacious, and that it is much easier to produce clean milk where the structural conditions are good. Producers in certain parts of the district are now keen to have their byres brought up to date, and in increasing numbers are consulting the Department for advice as to how the improvements can best be carried out.

It has been suggested by the Scottish Board of Health that reports of inspections of dairy premises could usefully be drawn up in score-card form. I regret that I must differ in opinion, as from what we have seen in the execution of such a system in another branch of the work the score card would prove absolutely unreliable, and therefore useless.

Houses Let-in-Lodgings.

As stated in former Annual Reports, owing to the scarcity of housing accommodation, the registration of houses let in lodgings is still in abeyance. Numerous inspections, however, were made of houses where single lodgers were kept or apartments sub-let to families, and action was taken where necessary.

Offensive Trades.

There are eleven private slaughterhouses in the district, situated as follows:—Caldercruix, Chapelhall, Cleland (3), Greengairs, Harthill (2), Longriggend, Newarthill, and Hareshawhead, Strathaven. In the course of the year regular visits of inspection were made, and, although the structural conditions are not quite satisfactory, the premises were all found in a clean condition.

An outfall drain from the private slaughter-house at Greengairs was found to pollute the Cameron Burn with blood, and, after negotiations, improved methods of blood collection were adopted.

Public Abattoirs.—There are seven abattoirs in operation belonging to the Local Authority, and these are situated at Baillieston, Blantyre, Bellshill, Larkhall, Shotts, Stonehouse, and Strathaven.

Knackery.—The only other offensive business carried on in the Middle Ward area is the knackery at Omoa, where the manufacture of manure is also engaged in. The operations continue to be conducted in a satisfactory manner.

Unsound Food.

The inspections during the year numbered 1,068, and three seizures were made by the Sanitary Officers, viz.:—Two of herring, 9½ stone; and six gallon-tins of preserved apples. Particulars as to the inspection of meat are given in the District Meat Inspector's Report, page 342.

Meat Regulations.

Storage of Meat.—No applications for a certificate of approval of storage accommodation, in terms of Section 12 of the Public Health (Meat) Regulations (Scotland), 1924, were made during the year.

Food Inspection.

During the year numerous inspections were made of shops, vans, &c., where foodstuffs were exposed for sale, and in the course of the inspections it was found that the quality of the articles exposed for sale was good. The shops in general were also kept in good condition, but in several instances it was observed that the back shop was much restricted in space and, as a rule, congested.

Fewer hawkers from outside this area are now encountered, doubtlessly due to the number of local unemployed men who have adopted the business as a means of eking out a livelihood, and their stock, if perishable, is small, and bought daily. The quality of the foodstuffs hawked was generally found to be good.

Two complaints were received of meat being prepared and sold from dwelling-houses, in one case potted-meat being retailed, and in the other butcher meat. A warning was given in each case, and the business was at once stopped.

Pigstyes.

The inspections made during the year numbered 371. One application for sanction to erect a pigstye was granted by the committee. All the premises, with a few exceptions, where a warning was administered, were found to be kept in good order, and free from nuisance conditions.

Burial Grounds.

The various burial grounds throughout the district continue to be kept in good order, and the bodies satisfactorily interred.

Churchyards, &c.—A number of interments was carried out in the old churchyard at Stonehouse in a satisfactory manner, and in East Kilbride Churchyard several burials also took place. In the latter churchyard permission to inter was refused in two instances owing to insufficient depth, and in one case three portions of a lair were opened before sufficient depth could be obtained to sanction burial, while in another instance two portions were opened before the necessary depth was obtained.

The other old churchyards and burial grounds continue to be kept in satisfactory condition.

Staffing.

Under the Local Government and Other Officers' Superannuation Act, 1922, Mr. James Buchanan, local sanitary inspector, Cambuslang, was retired as at 15th May, on attaining the age of 65 years. He had been in the service for the long period of 33 years. The best wishes of the department are with him in his retirement.

J. MILLAR,

District Sanitary Inspector.

District Offices,

Hamilton, 27th April, 1928.

COUNTY HOSPITAL

NEAR

MOTHERWELL

REPORT BY THE PHYSICIAN-SUPERINTENDENT,
JOHN REID, M.D., D.P.H., F.R.F.P.S.

1927

At the beginning of the year 246 cases were in residence. Throughout the year 1,673 were admitted, making a total of 1,919. Of these, 1,599 were discharged well or improved, 142 died, and 178 were in hospital at the end of the year. These figures are somewhat lower than those of the previous year due to the periodic decline in scarlet fever.

SCARLET FEVER admissions showed approximately a drop of 43 per cent. from the previous year. The fatality rate of 0.6 per cent. is the lowest on record for the hospital. The type of disease has been extraordinarily mild.

DIPHTHERIA numbers exceeded all previous records. In all, 419 cases were admitted to hospital. 32.4 per cent., however, were wrongly diagnosed. A little more than half of the corrected diagnoses were bacteriological cases without clinical signs. Practitioners are again reminded that the Medical Officer of Health is anxious to give every facility for early admission to hospital of children with the slightest evidence or suspicion of diphtheria without waiting for confirmatory bacteriological evidence. The case recorded on page 18 is worthy of perusal. Although a considerable number of extremely serious cases were treated, the fatality rate was only 2.4 per cent. of the clinical cases. This figure is also the lowest on record. On the whole the cases were admitted earlier.

ENTERIC FEVER numbers are still lower than formerly.

PUERPERAL SEPSIS CASES show a definite improvement in the numbers coming to hospital. They are apparently being notified more correctly than formerly. Practitioners are reminded that the Public Health Department is anxious to assist in the early removal even of doubtful cases. Hospital treatment is of the utmost value in most early cases, but futile when the patient is dying from septicæmia or

general peritonitis. The Local Authority can make, at present, provision for cases where a temperature of $100\cdot4^{\circ}$ F. has been sustained for 24 hours. A review of the treatment and results in 503 cases, where the average day of disease was nearly 10 days, is given later.

PNEUMONIA numbers have increased. Of the cases discharged nearly 40 per cent. were wrongly diagnosed. Anything from 10 to 20 per cent. may be taken as justifiable mistakes in diagnosis. Cases like constipation, moribund cardiac disease, tapeworm, and hyperemesis gravidarum are not. Nor is it justifiable to send a dying pneumonia to hospital in the middle of the night in the hope that any good will result.

TUBERCULOUS work only of the more urgent variety was undertaken, owing to the demands for accommodation for other infections.

VENEREAL DISEASES have also increased. Much useful work was undertaken in admitting female gonorrhoeal cases. Ophthalmia neonatorum cases cannot come into hospital too early. Two children were discharged with some defect in vision.

WHOOPING COUGH AND MEASLES. — Owing to the diminution in scarlet fever numbers some accommodation was available for measles and whooping-cough throughout most of the year. Although these facilities were not fully appreciated for the period under review, at the time of writing (May, 1928), many more cases are being sent to hospital. When those diseases are prevalent, the usual procedure is to send into hospital only complicated cases and patients seriously ill. The hospital death-rate is correspondingly high. The preventative aspect naturally arises. The notifying practitioner might consider if more good would not result from sending cases early before complications arose, and more particularly first cases and those occurring in crowded houses.

RADIOLOGICAL WORK.—The tuberculosis dispensaries have taken full advantage of the facilities provided for X-raying doubtful tubercular cases. In all 603 cases were photographed and reported upon.

The number of admission from ALL DISEASES was greatest in the month of October. The total for the whole month was 232. During the week ended 15th October, 63 cases were admitted. The greatest number admitted on one day was 16, on 19th October and 20th December. The average daily number of patients resident was $187\cdot3$. The greatest number resident on any one day was 269, on 1st November; and the smallest, 124, on 27th July.

The average duration of residence of all cases discharged was 41·3 days; of all recovered cases, 43·8 days; and of all fatal cases, 13·8 days.

The fatality rate, calculated on all cases discharged, was 8·1 per cent. The figure includes 25 cases dying within 24 hours of admission, and other non-notifiable cases, such as chronic bronchitis, cardiac disease, uræmia, cerebral hæmorrhage, &c.

The diagnosis of the medical attendant was revised in 414 cases, or 23·7 per cent. of the total discharged.

Request for removal of patients to hospital was made by the medical attendant in 33·4 per cent. of the cases, and by the Public Health Department in 66·5 per cent.

Scarlet Fever.

At the beginning of the year 130 cases were in residence. Throughout the year 452 cases were admitted, of which 68 were wrongly diagnosed. Eight other patients proved to be cases of scarlet fever. Of the 522 actual cases, 465 were discharged well, 3 died, and 54 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out in 91 per cent. of the cases in the first week of the disease, 4·7 per cent. in the second week, and 4·2 per cent. during the third week or later.

THE AVERAGE DAY OF DISEASE of all cases was 3·5 days.

THE AVERAGE DURATION OF RESIDENCE of all cases was 51·9 days; of recovered cases, 52·2 days; and of fatal cases, 7·6 days. The following table indicates the period of residence of the 465 recovered cases :—

Week of Discharge.		No. of days in Residence when Discharged.								No. of Cases in each day.								No. or Cases in each week.
																		4
Under fifth,	-																17	
Fifth, -	-	29	30	31	32	33	34	35		1	1	3	1	3	4	4	108	
Sixth, -	-	36	37	38	39	40	41	42		8	13	8	8	17	31	33	170	
Seventh, -	-	43	44	45	46	47	48	49		33	41	43	10	15	9	9	59	
Eighth, -	-	50	51	52	53	54	55	56		12	8	7	13	5	8	6	30	
Ninth, -	-	57	58	59	60	61	62	63		10	4	7	4	2	1	2	22	
Tenth, -	-	64	65	66	67	68	69	70		3	4	1	5	4	4	1	55	
Over ten weeks, -	-	—	—	—	—	—	—	—		—	—	—	—	—	—	—	465	
Total Number of Cases,											-	-	-	-	-	-	-	465

TYPE OF DISEASE.—398, or 85 per cent. of the total cases discharged, were classified as mild; 41, or 8·7 per cent., as moderately ill; and 29, or 6·1 per cent., as very severe. In the latter group, 7 were septic and 2 toxic.

THE FATALITY RATE, as calculated on the discharges, was 0·64 per cent. THE FATAL CASES were 3 females. The ages were 1, 6, and 7 years respectively. Two were septic in type and 1 toxic. The average duration of illness on admission was 2·6 days, and the average duration of residence, 7·6 days.

CORRECTED DIAGNOSES.—Of the cases notified as scarlet fever, 12·8 per cent. were wrongly diagnosed. These were:—Bronchitis, 1; chickenpox, 2; dermatitis, 1; diphtheria, 2; doubtful, 10; enteritis, 3; erythema, 4; gastro-enteritis, 1; influenza, 2; naso-pharyngitis, 1; measles, 1; negative, 17; rhinitis, 1; septic tonsils, 1; sore throat, 16; tonsillar abscess, 1; urticaria, 2; venereal diseases, 2.

COMPLICATIONS.—36·3 per cent. of the discharges had one or more complications.

Glands. — 94, or 20 per cent. of the cases discharged, showed glandular enlargement. In 3 cases suppuration resulted. All degrees of glandular involvement are included.

Ear.—38, or 8·1 per cent., developed otitis media. In 3 cases the ear was moist on discharge. In 1 case the mastoid region was involved.

Heart.—19 cases, including 15 of arrhythmia, developed functional disorders.

Nose.—61, or 13 per cent., developed rhinitis.

Joints.—13, or 2·7 per cent., developed varying degrees of arthritis.

Kidney.—3, or 0·6 per cent., had true nephritis. There were 8 cases of mild albuminuria.

Lungs.—1 case developed lobar pneumonia and 1 bronchitis.

Eye.—Blepharitis, 1; conjunctivitis, 1.

Skin.—Dermatitis, 1; erythema, 2.

Sepsis.—Abscesses, 6; boils, 1; paronychia, 6; pyæmia, 1.

Other Complications.—Positive swab, 13; cellulitis of neck, 2; tonsillitis, 2; laryngeal stenosis, 1; herpes, 2.

Other Conditions present on Admission and not related to the Attack of Scarlet Fever.—Chronic otitis media, 6; corneal ulcer, 1; dislocated spine, 1; eczema, 1; impetigo, 2; jaundice, 1; laryngitis, 1; old cardiac disease, 2; old fracture of arm, 1; psoriasis, 1; thread worms, 1; tinea tonsurans, 1; vaginitis, 4.

The two following tables show the age-periods and week of illness at which the complications occurred:—

AGE.	CERVICAL ADENITIS.		OTITIS MEDIA PURULENTA.			CARDIAC COMPLICATIONS.		Mastoiditis.	Arthritis.	Nephritis.	Rhinitis.
	Suppurative.	Non-Suppurative.	Left.	Right.	Double.	Organic.	Functional.				
Under 1 Year, -	—	—	—	—	1	—	—	—	—	—	1
-2 " -	1	5	2	1	—	—	—	—	—	—	6
-3 " -	1	5	1	—	3	—	—	—	—	—	7
-4 " -	—	12	2	2	1	—	—	—	—	1	16
-5 " -	—	8	1	1	2	—	1	—	—	—	7
-6 " -	—	10	2	3	1	—	—	—	—	1	9
-7 " -	—	7	2	1	1	—	—	—	1	—	2
-8 " -	—	3	—	—	—	—	—	—	—	—	2
-9 " -	1	10	1	1	1	—	—	—	1	—	5
-10 " -	—	4	1	1	—	—	—	—	2	—	2
-15 " -	—	20	2	2	—	—	—	1	4	1	2
-20 " -	—	3	—	1	—	—	1	—	1	—	—
Over 20 " -	—	4	—	1	—	—	2	—	4	—	2
Total, -	3	91	14	14	10	—	4	1	13	3	61

WEEK OF ILLNESS.	CERVICAL ADENITIS.		OTITIS MEDIA PURULENTA.			CARDIAC COMPLICATIONS.		Mastoiditis.	Arthritis.	Nephritis.	Rhinitis.
	Suppurative.	Non-Suppurative.	Left.	Right.	Double.	Organic.	Functional.				
First, - -	1	34	3	4	3	—	—	—	5	—	39
Second, - -	1	21	5	2	4	—	2	—	3	2	5
Third, - -	1	16	3	1	2	—	1	—	—	1	2
Fourth, - -	—	12	2	2	—	—	1	1	2	—	6
Fifth, - -	—	4	—	5	1	—	—	—	1	—	2
Sixth, - -	—	2	1	—	—	—	—	—	2	—	1
Seventh, - -	—	1	—	—	—	—	—	—	—	—	3
Eighth, - -	—	1	—	—	—	—	—	—	—	—	1
Ninth, - -	—	—	—	—	—	—	—	—	—	—	1
Over Ninth, -	—	—	—	—	—	—	—	—	—	—	1
Total, -	3	91	14	14	10	—	4	1	13	3	61

SCARLET FEVER ANTITOXIN.

No. of Cases.	Maker.	Average.	Serum Rashes.		
			Urticarial.	Morbilliform.	Scarlatiniform.
5 (1 fatal), -	B. W. & Co. and P. D. & Co.	21 c.c. and 12 c.c.	1	—	—
10 (2 fatal), -	P. D. & Co.	17 c.c.	—	—	—
136, - - -	B. W. & Co.	10 c.c.	33	5	2

DIPHTHERIA ANTITOXIN.

No. of Cases.	Maker.	Average.
56	... P. D. & Co.	... 6,400 units.

MIXED INFECTIONS.—Chickenpox, 2; diphtheria, 4; erysipelas, 1; whooping-cough, 6, one case was incubating the disease.

CROSS INFECTIONS. — 3 cases were infected with chickenpox in hospital.

“RETURN” CASES.—28 days is taken as the period within which a case is regarded as a “return.” In the following figures, cases which proved on observation not true cases have been disregarded. 12 cases were suspected of infecting 8 others. In one instance 2 children went home to one house, and in another 4.

The “infecting” cases were clean on discharge; 1 had a paronychia in hospital, 1 conjunctivitis, 1 rhinitis, and 1 otitis media. The type of disease was mild in 10, moderate in 1, and severe in 1.

The average residence in hospital of the “infecting” cases was within the average. Eight of the “infecting” cases had scarlet antitoxin while in hospital. All the “return” cases were mild.

* The infectivity rate is 2.5 per cent. of all true cases discharged.

Three of the “return” cases occurred within one week, and 5 within two weeks of discharge of the “infecting” case.

	1922.	1923.	1924.	1925.	1926.	1927.
Number of scarlet fever patients discharged recovered, - -	979	879	818	800	707	465
Number of presumably infectious cases discharged, - - -	37	24	8	20	9	12
Infectivity rate, - - -	3.7	2.7	0.9	2.5	1.2	2.5
Number of deaths from scarlet fever, - - - -	18	19	16	16	7	3
Fatality rate, - - - -	1.8	2.1	1.9	1.9	0.98	0.64
Average duration in days of the cases discharged, - - -	47.5	49.2	50.2	51.9	50.6	51.9

Ionisation for Otitis Media.

32 cases of otitis media were treated with zinc ionisation. All the cases were first tried for one to two weeks with the usual antiseptic treatment.

In 26 cases of scarlet fever, including 6 of chronic otitis media, cure apparently resulted in 22, and 4 were moist after varying periods of treatment.

6 other patients (other diseases) with chronic otitis media were either cured or improved.

Both ears were involved in 9, the right ear in 13, and the left ear in 10. In most of the acute cases 3 to 4 applications were sufficient to dry the ear. As many as 25 were required in the chronic cases of long duration. The average number of applications given was 7.7.

Dick Test in Scarlet Fever.

The following figures conclude the work carried on in 1926 in scarlet fever.

462 cases of scarlet fever were "Dicked" at weekly intervals throughout the course of the disease. 21 children were immunised with scarlet fever prophylactic.

WEEK OF DISEASE.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total.
Positive,	3	28	44	48	50	44	36	23	12	9	5	5	3	2	2	314
Negative,	6	59	156	211	203	172	94	52	24	14	11	7	6	2	2	1,019
Total,	9	87	200	259	253	216	130	75	36	23	16	12	9	4	4	1,333

Schick Test in Scarlet Fever.

AGE-PERIODS.

	1	2	3	4	5	6	7	8	9	10	Over 10	Total.
Positive,	2	12	25	25	22	27	16	19	12	14	48	222
Negative,	1	18	18	12	29	28	19	20	20	12	67	244
Total,	3	30	43	37	51	55	35	39	32	26	115	466

221 of the susceptibles were immunised with toxoid-antitoxin.

Prophylaxis in Other Diseases.

Children admitted to hospital with other diseases, like measles, whooping-cough, tuberculosis, &c., were "Dicked" and the susceptibles immunised.

Of 136 children, 39 were positive, and of these, 30 were immunised against scarlet fever.

The After-Histories of Scarlet Fever.

Scarlet fever is commonly looked upon by the public as a mild disease from which most children suffer sooner or later. Unfortunately, complications follow in many cases. Deafness, otorrhœa, chronic renal disease and cardiac affections, are frequently dated from an attack of scarlet fever in childhood.

With the object of obtaining some information as to the frequency of these after-effects later in life, Dr. Sharpe, the senior assistant, examined 411 children 6 months to 7 years after discharge from hospital.

We set out with the object of determining the frequency with which after-effects developed in later life, and tried to obtain for examination 100 cases which had been clean in hospital, 100 who had had either cardiac murmurs or arthritis, 100 kidney cases, and 100 cases of otitis media.

Of 1,281 cases written to, only 411 appeared for examination.

GROUP.	Heart	Kidney.	EAR.		Total.	Percentage.
			Otitis Media.	Deafness.		
100 Clean cases examined 5 years later, - - -	1	6	1	1	9	9.0
92 Clean cases examined 6 months later, - - -	—	1	5	1	6	6.5
16 Heart murmurs examined 4-7 years later, - -	4	—	—	—	4	11.8
18 Arthritis cases examined 4-7 years later. - -	—	—	—	—	—	—
94 Kidney cases examined 4-7 years later, - - -	—	3	—	—	3	3.1
91 Ear cases examined 4-7 years later, - - -	—	1	31	3	35	38.4
Percentage in 411 cases, -	1.2	2.6	8.7	1.2	13.8	

Clean Group.—100 clean uncomplicated cases were examined 5 years after discharge from hospital.

A girl, aged 7 years, took chorea shortly after leaving hospital. She had a well-marked systolic murmur, but no symptoms. 6 others had varying degrees of albuminuria. In 3 the amount varied from 1 to 2 parts per 1,000, and in other 3 more than 2 parts per 1,000.

Another girl took an otitis media 2 months after discharge from hospital. The ear is still discharging. One other case was slightly deaf.

92 other clean cases were seen 6 months after discharge with the following results:—Albuminuria, 1; otitis media, 4; slight deafness, 1.

After-effects were present in 9 per cent. of the 100 clean cases examined 5 years later.

Of 92 other clean cases examined for another purpose, 6, or 6.5 per cent., had some after-effect.

Potential Heart Group.—Of 16 cases in which cardiac murmurs developed during scarlet fever, 12 were discharged with the murmur still present. 4 of these 12 patients still presented signs of cardiac involvement 4 to 7 years later.

A girl discharged with a loud V.S. murmur exhibited definite hypertrophy of the heart with a very loud V.S. mitral murmur.

Another female had a double mitral murmur with signs of palpitation.

2 other patients had V.S. murmurs without subjective symptoms.

18 others had had varying degrees of arthritis while in hospital. On examination 4 to 7 years later, 3 gave a history of occasional recurrent joint pains, but no signs of permanent damage.

Kidney Group.—The 94 children examined had had albuminuria for at least 5 days during the attack of scarlet fever. 20 of these had true acute scarlatinal nephritis. In 3, less than 2 parts albumen persisted. One of these had persistent headache. All of the true nephritis cases were apparently well.

Ear Group.—Of 91 cases of otitis media who had been discharged apparently cured, 11 had recurrences of the discharge for periods varying from 1 month to 2 years. They were apparently healed at the time of examination.

31 cases were still suffering from discharging ears. 3 others had some deafness, and 3 occasional pain. 2 other children had V.S. murmurs without symptoms, apparently due to rheumatic fever and chorea, immediately after leaving hospital and 3½ years later respectively.

One other case had mild albuminuria.

It would therefore appear that from 7 to 8 per cent. of clean uncomplicated cases of scarlet fever suffer from some disability in after years. In the total group of 411 cases, clean and complicated, the figure is nearly double. A murmur developing in the course of mild scarlet fever, often classified as functional, becomes permanent in about a quarter of the cases.

The albuminuria figure is small. Not one of the 20 acute nephritis cases showed after-effects.

If 34.4 per cent. of cases of scarlatinal otitis media, dismissed apparently cured, have permanent after-effects, revision of methods of treatment and standards of cure are indicated.

Conclusions.—Scarlet fever, even of the mildest type, can leave serious disabilities. Of these, ear damage is the most frequent.

This short investigation is a strong argument for prophylactic active immunisation of the child population.

Case of Laryngeal Stenosis, 8 Tracheotomies, and 8 Intubations.

A girl, aged $8\frac{1}{2}$ years, was notified as scarlet fever on 20th November, 1924. She had had scarlet fever $5\frac{1}{2}$ weeks previously. On admission to hospital the patient was *in extremis* from asphyxia. A large discharging abscess was present on the right side of the neck. Immediate tracheotomy relieved the patient after casts of the bronchi were coughed up. Repeated bacteriological examination failed to find diphtheria bacilli.

In 2 days the tube was removed, but in a few hours had to be re-inserted. For 4 weeks the patient could not do without the tube for longer than a few hours. It was now feared that the condition had been a streptococcal ulceration of the larynx or trachea, resulting in stenosis. On the 18th December, 1924, intubation (No. 4 tube) was performed to get rid of the tracheotomy cannula. A stricture above the tracheotomy wound was detected. During the next 2 months the intubation tube was coughed out three times. At those periods the girl immediately got so ill that the tracheotomy wound had to be opened up to save the patient's life. On the 9th February, 1925, No. 6 intubation tube was inserted.

For the next 2 years at varying intervals the tube was removed for cleaning purposes, but on each occasion the obstruction developed so rapidly that immediate re-opening of the tracheotomy wound was necessary.

During 1926 a bronchoscopic examination was performed on two occasions, but nothing in the way of granulation tissue, or absorption of tracheal cartilages was detected. Dr. Brown Kelly, who performed the last bronchoscopic examination, advised leaving the tracheotomy tube in to rest the upper parts. This was done for 3 weeks, but at the end of that time contraction was recurring and No. 6 tube was re-inserted with difficulty.

Assuming that the very rapid obstruction, occurring after the removal of the intubation tube, was due to swelling of œdematous mucous membrane the idea was conceived of X-raying the larynx to produce cicatrization of the œdematous mucous membrane.

From 11th March, 1927, to 4th April, 1927, 4 pastille doses were given in all to either side of the larynx and upper trachea through 1.5 mm. Al. filter.

On 30th April, 1927, the patient was extubated, and remained able to do without the tube.

She was discharged apparently cured on the 14th May, 1927. When last examined, January, 1928, the patient was quite well and had no trouble except a little hoarseness. The mother states that this is, however, clearing up.

Comment.—A number of points are of interest in the case.

(1) The scarlet fever was missed and apparently the laryngeal involvement was neglected until the patient, æt. $8\frac{1}{2}$ years, was *in extremis*.

(2) The failure to find diphtheria bacilli in the laryngeal membrane, and the coughing up of large pieces of slough and casts pointed to a streptococcal ulceration.

(3) The question naturally arose what was the exact nature of the condition. It was certainly something more than a post-scarlatinal diphtheria. The view taken was that it might possibly be a streptococcal ulceration of the larynx, which may or may not have followed a laryngeal diphtheria. The diffuse ulceration in the early weeks may have accounted for the inability to get rid of the tracheotomy cannula.

Later, when the intubation tube allowed the wound to heal the mucous membrane possibly remained œdematous and became swollen immediately the tube was removed, together with a degree of abductor paralysis from long continued use of the tube. These two factors, acting on removal of the tube closed the glottis.

This closure was so sudden and extreme on removal of the tube that there was not even time to re-thread and clean the tube for re-insertion. The child got so ill in a few minutes that tracheotomy had to be performed without delay. Bronchoscopic examination was done late, but certainly failed to show evidence of collapse of the trachea from absorption of cartilage.

(4) Whether the applications of X-rays produced some atrophy of the œdematous mucous membrane and whether the result was a mere coincidence it is impossible to say. The fact remains, that 26 days after the last dose, the patient was able to breathe without a tube, which she had not done for 3 years.

(5) The ultimate success of the case was to a very large extent due to the extraordinary patience of the mother and the patient herself.

(6) The satisfaction of discharging the patient without a permanent tracheotomy wound amply repaid the nursing staff for 3 years of considerable care and worry.

Diphtheria.

62 cases were in hospital at the beginning of the year, 419 were admitted as such, 138 were wrongly diagnosed, and 2 others proved to be cases of diphtheria. Of these 345 cases, 280 were discharged well, 7 died, and 58 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out within the first three days of illness in 57·8 per cent. of the cases. For the fatal cases the average duration of illness prior to admission was 5·3 days.

THE AVERAGE DAY OF DISEASE of all cases on admission was 3·6 days.

DURATION OF RESIDENCE.—The average duration of residence of all cases was 48·8 days; of recovered cases, 49·9 days; and of fatal cases, 8·5 days.

Type of Disease.

FAUCIAL DIPHTHERIA.—In 236 cases, including 3 fatal ones, the faucial region of the throat was affected.

Mild.—In 120 instances the exudate was limited, with little or no toxæmia. 1 case had antitoxin before admission. The average amount of serum given in hospital was 6,300 units. 1 case had 10 c.c. of concentrated scarlet fever antitoxin.

Complications and Sequelæ.—Adenitis, 2; suppurative adenitis, 2; arrhythmia, 4; bradycardia, 1; erythema, 1; otitis media, 1; urticarial rash, 5.

4 cases developed chickenpox in hospital.

3 diphtheria carriers had tonsils removed.

MODERATE.—In 48 instances the membrane or exudate was more extensive, and accompanied by considerable toxæmia. 1 case had antitoxin before admission to hospital. The average amount of serum given was 13,500 units.

Complications and Sequelæ.—Arrhythmia, 3; palatal paralysis, 2; paronychia, 1; morbilliform rash, 2; urticarial rash, 2; erythema, 1.

SEVERE.—68 cases, including 3 fatal ones, were of the severe type. 1 case had serum before admission. The average amount of serum was 40,700 units. 8 cases had scarlet fever antitoxin.

Complications and Sequelæ.—Adenitis, 4; albuminuria, 3; broncho-pneumonia, 1; otitis media, 2; rhinitis, 4; urticarial rash, 7; erythema, 2; palatal paralysis, 5; cardiac, pharyngeal, palatal, and

lower limbs paralysis, 1; cardiac and palatal paralysis, 2; cardiac paralysis, 1; arrhythmia, 4; squint, 2. 1 case developed chickenpox in hospital.

LARYNGEAL DIPHTHERIA.—In 32 cases the larynx was involved.

MILD.—In 19 cases the stenosis was slight. The average amount of serum given in hospital was 7,000 units. 2 cases had scarlet fever antitoxin.

Complication and Sequelæ.—Otitis media, 1; urticarial rash, 4.

MODERATE.—9 cases showed signs of more extensive laryngeal obstruction. The average amount of serum given was 19,500 units.

Complications and Sequelæ.—Otitis media, 1; urticarial rash, 2. 1 case had diphtheria and whooping-cough, and 1 developed chickenpox in hospital.

SEVERE.—In 4 cases the stenosis was extreme. These cases all required operative interference. The average amount of serum given was 17,000 units. 1 case had scarlet fever antitoxin.

Complications and Sequelæ. — Cardiac paresis, 1. 2 cases had chickenpox in hospital.

FAUCIAL AND LARYNGEAL DIPHTHERIA.—The fauces and larynx were involved in 8 cases, including 1 death.

3 were mild, 4 moderate, and 1 severe in type. The average amount of serum given in hospital was 25,000 units. 2 cases had scarlet fever antitoxin.

Complications and Sequelæ.—Adenitis, 2; rhinitis, 1; cardiac paralysis, 1.

The fatal case had been neglected. It had been ill 6 days. Tracheotomy was performed, but the patient died from cardiac paralysis.

FAUCIAL AND NASAL DIPHTHERIA.—In 9 cases, including 1 death, the fauces and nose were involved. All were severe. The average amount of serum given in hospital was 73,300 units. 2 cases received scarlet fever antitoxin.

Complications and Sequelæ.—Otitis media, 1; palatal paralysis, 2; cardiac paralysis, 1; urticarial rash, 2.

TRACHEO-BRONCHIAL DIPHTHERIA.—A child, aged 2 years, was admitted in a dying condition. He had been ill 8 days prior to admission. Tracheotomy failed to relieve the breathing.

DIPHTHERITIC PARALYSIS.—A child, aged 6 years, was admitted dying from late pharyngeal paralysis. The case had been missed. This patient received 48,000 units of serum.

The following table summarises the sites of membrane in the total cases discharged :—

SITE OF MEMBRANE.	MILD.		MODERATE.		SEVERE.		TOTAL.	
	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.
Faucial, - - - -	120	—	48	—	65	3	233	3
Laryngeal, - - - -	19	—	9	—	4	—	32	—
Faucial and laryngeal, - -	3	—	4	—	—	1	7	1
Faucial and nasal, - - -	—	—	—	—	8	1	8	1
Tracheo-bronchial, - - -	—	—	—	—	—	1	—	1
Diphtheritic Paralysis, - -	—	—	—	—	—	1	—	1
							280	7

DIPHTHERITIC PARALYSIS.—31 cases, or 10·8 per cent. of the clinical cases discharged, developed paralysis in one form or another while in hospital. The regions affected were:—Palate, 9; recti muscles of eye, 2; heart, palate, pharynx and lower limbs, 1; arrhythmia, 11; bradycardia, 1.

MIXED INFECTIONS.—Diphtheria and chickenpox, 6; diphtheria and scarlet fever, 1; diphtheria and whooping-cough, 2.

COMPLICATIONS.—28·2 per cent. of the recovered cases developed one or more complications. This figure includes serum rashes.

OTHER CONDITIONS PRESENT ON ADMISSION.—Fractured arm, 1; tapeworm, 1; vaginitis, 3.

CORRECTED DIAGNOSES.—138, or 32·4 per cent. of the cases discharged, were wrongly diagnosed :—Bronchitis, 1; chronic nephritis, 2; glandular abscess, 2; Ludwig's angina, 1; naso-pharyngitis, 2; negative, 3; pneumonia, 1; positive swab, 75; scarlet fever, 6; sore throat, 38; tonsillar abscess, 1; tonsillitis, 2; tubercular meningitis, 1; ulcer of tongue, 1; whooping cough, 2.

FATALITY RATE—7 cases, or 2·4 per cent. of the true cases discharged, were fatal.

FATAL CASES. — Of the 7 deaths, 4 were males and 3 females. The average age was 11·7 years; the average duration of illness prior to admission was 5·2 days; and the average residence in hospital was 10 days.

The average amount of serum was 71,000 units. Only 1 case had serum before admission to hospital.

All the fatal cases died within a few days of admission with the exception of 1 child, who died in the seventh week of residence, from late cardiac and bulbar paralysis.

3 of the 7 fatal cases were definitely neglected and admitted moribund. In those 3 cases the medical practitioner had been in attendance for several days.

1 case, an adult 47 years, is an outstanding example of the futility of neglecting clinical appearances and waiting for bacteriological confirmation before giving serum or sending the case into hospital. For almost a week this case had been closely observed by the medical attendant, who had thought the case sufficiently like diphtheria to take two swabs. The negative results seemed to obsess the practitioner, who did not send the case into hospital until the larynx and trachea were involved. A tracheotomy failed to relieve the obstruction, and the patient died in a few days.

OPERATIVE TREATMENT.—In 6 cases tracheotomy was necessary. Of these, 2, or 33·3 per cent., died.

ANTITOXIN.—3, or 1·04 per cent. of the cases discharged, had serum before admission to hospital. The average amount of serum given in hospital was 19,100 units. 16 cases had on an average 10 c.c. of scarlet fever antitoxin. After-effects were noted in 28, or 6·9 per cent. of the 287 true diphtherias. 3 cases, who had both forms of sera, had serum rashes. The rashes were—Urticarial, 22;

morbilliform, 2; scarlatiniform, 4. In 425 cases, including wrong diagnoses, 7 per cent. developed serum rashes. Messrs. Parke, Davis, & Company's concentrated serum was used throughout the year.

BACTERIOLOGICAL CASES.—Of the 75 cases, 24 were "Schicked" before serum was given. Of these, 19 were positive and 5 negative. The County Bacteriologist found the organism virulent in 4 Schick positive cases, and avirulent in 12 Schick positive cases.

Dick Test.

Diphtheria cases were "Dicked" as a routine, and the susceptibles immunised. Of 328 notified cases, 117 were positive, and 112 were immunised against scarlet fever.

AGE-PERIODS.

	1	2	3	4	5	6	7	8	9	10	Over 10	Total.
Positive,	4	9	14	19	19	14	13	5	6	4	10	117
Negative,	1	10	17	16	15	25	24	17	13	12	61	211
Total,	5	19	31	35	34	39	37	22	19	16	71	328

Enteric Fever.

1 case was in hospital at the beginning of the year, and 9 were notified. 7 of these were wrongly diagnosed. Of these 3 cases, 1 recovered, 1 died, and 1 was in hospital at the end of the year.

(1) A male, aged 12 years, had been ill 16 days. After a mild attack he was discharged in 38 days.

(2) A female, aged 40 years, was in the 14th day of disease when admitted to hospital. She was seriously ill, developed intestinal hæmorrhage, and died in 6 days.

CORRECTED DIAGNOSES.—Bronchitis, 1; influenza, 1; malignant endocarditis, 1; meningismus, 1; positive Widal, 1; round worms, 1; tubercular meningitis, 1.

Puerperal Fever.

Nine cases were in hospital at the beginning of the year, 88 were admitted, 9 were wrongly diagnosed, and 1 other proved to be a case of puerperal fever. Of these 89 cases, 56 recovered, 24 died, and 9 were in hospital at the end of the year.

TYPE OF DISEASE.—Mild, 17; moderate, 25; severe, 38.

THE AVERAGE AGE of the patients was 29·8 years; 7 were under 20 years of age, 18 between 21 and 25 years, 18 between 26 and 30 years, 20 between 31 and 35 years, 9 between 36 and 40 years, 7 between 41 and 45 years, and 1 between 46 and 50 years of age.

The AVERAGE DURATION OF ILLNESS of all cases prior to admission was 6·8 days; of recovered cases, 6·5 days; and of fatal cases, 7·4 days.

THE AVERAGE DURATION OF RESIDENCE was 35·1 days.

ATTENDANCE AT BIRTH.—Doctor, 10; midwife, 20; doctor and midwife, 33; hospital cases, 14; nil, 3.

The FATALITY RATE was 30 per cent.

COMPLICATIONS AT BIRTH.—Instrumental delivery, 26; craniotomy, 3; cæsarian section, 1; induction, 1; abortion, 2; hæmorrhage, 3; retained placenta, 1.

NUMBER OF PREGNANCY at which disease occurred :—

Pregnancy.	No. of Cases.		Instrumental Delivery.	
	Recovered.	Died.	Recovered.	Died.
1	20	4	9	4
2	5	3	1	2
3	8	2	2	—
4	3	4	1	2
5	4	1	—	—
6	6	3	1	—
7	3	—	1	—
8	2	4	1	1
9	1	—	—	—
10	2	1	—	1
11	2	1	—	—
15	—	1	—	—
Total, - -	56	24	16	10
	80		26	

COMPLICATIONS DURING THE FEVER.—Abscesses, 2; anæmia, 8; bacilluria, 1; effusion pleural, 1; empyema, 1; malignant endocarditis, 1; mastitis, 1; nephritis, 2; pelvic abscess, 3; peritonitis, 3; pneumonia, 1; tears, 10; thrombosis, 6.

CORRECTED DIAGNOSES.—Abortion, 1; eclampsia, 1; mastitis, 1; pelvic abscess, 1; pyelitis, 1; subinvolution of uterus, 1; thrombosis, 2; uræmia, 1.

1 case, notified pneumonia, was suffering from puerperal fever. In 3 cases the patient had suffered from puerperal sepsis on two occasions.

TREATMENT.—Neokharsivan and scarlet fever antitoxin were used throughout the year.

A REVIEW OF THE TREATMENT OF 503 CASES OF PUERPERAL SEPSIS.

Local Treatment.

There is no unanimity of opinion as to the best method of dealing with the localised wound infection. The two extremes—namely, those who advocate leaving things severely alone, and those who adopt methods like sharp curetting and the application of strong antiseptics to the uterine surface—can show equally convincing figures.

From the type of case seen in the Fever Hospital it is difficult to stand by and do nothing.

No amount of curetting or the application of strong antiseptics to the uterine mucous membrane will help a patient where the organisms have got into the lymphatics and blood stream. On the other hand, it is difficult to see what harm can be done by the gentle washing of a cavity with a bland fluid. The uterus is often filled with pus, or contains in some cases considerable pieces of necrotic tissue. It is astonishing the number of cases where a large soft uterus has fallen backwards with its cavity filled with pus—in other words, an abscess cavity.

In 17 instances large pieces of placenta were obtained, ranging in size from that of a fist to a whole placenta.

The attitude adopted throughout the series is that a carefully given intra-uterine douche of warm saline does no harm. At the same time we can determine the presence of pus or placenta, and drain this septic cavity.

The use of strong antiseptics to the uterine mucous membrane is to be deprecated.

It is the washing out that is of value, and saline or plain sterile water is sufficient.

On admission, after the patient has been washed, shaved, warmed up, and generally made comfortable, in the lithotomy position, the vagina is washed out with saline or weak soda solution, and any stitches removed. Thereafter, a smear is taken from the cervix, and the uterus is washed out by a bi-way cannula. About 6 pints of fluid are run through, and no antiseptic is applied. A tube is then inserted, and 60 c.c. of glycerine are slowly introduced. The tube is kept in position by loosely packing the vagina with gauze soaked in glycerine and ichthyol. Glycerine is injected 2 or 3 times a day, and the packing renewed twice a day.

Further, it is important to keep the patient in the sitting-up position as much as possible for drainage. This procedure not only aims at helping the local condition, drains the uterus, produces lymphocytosis, stimulates contraction, and helps to bring away any little pieces of membrane or placenta, which have not come by the douching. The tube, as a rule, is pushed out in 3 or 4 days, when it is left out.

This glycerine drainage, popularised by Dr. Remington Hobbs, of St. Mary Abbots, London, is useful, but will not save a late septicæmic case. In early cases, with temperature just risen, it is of the greatest value. A great many cases would go no further if they had an injection of glycerine and put into the Fowler position early.

Of the larger operation, hysterectomy and ligature of veins, I have no experience. The cases where it might have been discussed are just those who could not stand a severe operation and the patient who could stand the operation was not ill enough to suggest it.

In general peritonitis the abdomen or Pouch of Douglas was opened immediately.

Where laparotomy was performed, the veins were ligatured. Of 15 cases of general peritonitis one recovered.

Localised collections of pus—such as pelvic abscess, septic joints, and mastitis—were all opened.

Serum Therapy.

The success of anti-diphtheritic serum has been a stimulus to the production and trial of all sorts of sera in bacterial disease. On the assumption that streptococci are the chief causal organisms, anti-streptococcal sera have been extensively used in puerperal sepsis. The results have been anything but consistent. The probable cause of this is streptococci seem incapable of producing a powerful antitoxin like the diphtheria organism.

The sera on the market are of the polyvalent type. As the varieties of streptococci are numerous, we can hardly expect a specific effect from polyvalent sera. Still, from time to time, dramatic results are obtained sufficient to stimulate us to further trial; even beneficial results have been obtained by streptococcal serum where the organism has been a staphylococcus or a coliform organism.

The good results are probably due to some other factor, such as acting as a leucocytic stimulant. In the failures, the leucogenic apparatus is probably defective or incapable of stimulation.

Our results have been disappointing. Of 155 cases treated with serum (all types) alone or combined with other forms of treatment, 53, or 34·2 per cent., died.

The procedure generally adopted was—25 c.c. to 100 c.c. were given intravenously at once, repeating the dose daily into the vein or muscle, or both, for several days, until it was apparent whether the remedy was of value or otherwise.

The ordinary polyvalent streptococcal or puerperal serum was used in 51 cases, with a death-rate of 29·4 per cent. In 12 cases we noted definite beneficial effects. In other 33 cases where the serum was succeeded by other forms of treatment, 12 died, giving a death-rate of 36·3 per cent.

The introduction of the newer scarlet fever antitoxin immediately led to a trial. 50 cases had, on an average, 20 c.c. concentrated serum. 19, or 38 per cent., died. In 21 out of 31 recoveries an improvement was noted.

Recently, Parke, Davis, & Company have produced a puerperal streptococcal antitoxin, which it is said has both anti-bacterial and antitoxic properties. Although this serum is not on the market, we have been able to obtain samples, and have tried it in 10 cases, 5 recovered and 5 were fatal. In 2 of the 5 recovered cases a very favourable effect was noted.

In 11 cases autogenous or stock streptococcal vaccines were tried, with 9 recoveries and 2 deaths.

An unmarried woman, æt. 17, was delivered in the local maternity hospital, breech, stillborn, on 29th August, 1927. Next day she had a severe rigor, with a temperature of 105° . She was immediately given 20 c.c. of Parke, Davis' serum. When admitted to Motherwell on the 31st August, 1927, three days after confinement, she was very ill, delirious, rigors, and altogether looked liked dying. She got another 20 c.c. of Parke, Davis' serum, with beneficial effect, and, although her temperature did not settle for a month, I was satisfied that the serum saved her.

The makers make a strong point of its prophylactic value.

The total results of serum treatment have been unsatisfactory. When no benefit was got early with serum, other forms of therapy were tried successively. If the results were not good, no harm was done, at most a rigor or a serum rash were the only disadvantages. Serum does not exert any beneficial effect on complications, nor has it any preventative value.

In localised infections, like thrombosis and pelvic cellulitis, serum is valueless.

Antiseptics.

The failure of operative and serum treatment to produce good results, and the knowledge that so many puerperal cases are septicæmic in nature, has led of late years to the more extensive trial of all sorts of antiseptics introduced into the blood stream for the purpose of reducing the virulence or destroying the micro-organism. A little consideration will convince us of the futility of expecting very much from this procedure. The action of an antiseptic on a micro-organism in a test tube is a very different experiment from introducing a limited quantity of an antiseptic into the blood stream. No antiseptic we know of possesses the selective action of destroying bacteria and leaving undamaged living cells; indeed, the cells are more easily affected than the organism with its protective covering.

The antiseptics tried here are sufficiently representative to put their case before you.

Eusol.

Eusol is a solution of hypochlorous acid. It was popularised during the war period. After reading Lorraine Smith's paper in 1915, we tried Eusol in different infections, including puerperal sepsis, with varying results.

The drug was given intravenously at blood heat in 50-100 c.c. doses, and repeated several times at daily intervals until it was apparent whether it was doing any good or not.

As usual, a few dramatic results were got, but in the majority they were no better than other antiseptics. 60 cases were treated, with a death-rate of 43·3 per cent. In 14 of 34 recovered cases improvement did result.

Colloidal Metals.

Colloidal metals have been fairly extensively employed in puerperal infections. Colloidal iodine is the one we have most experience of, and, to a lesser extent, colloidal gold and silver. The iodine preparation was given undiluted in 50-100 c.c. intravenously, and repeated daily as before. The gold and silver preparation was used in 5-10 c.c. doses. In all, 98 cases were treated, with 25 deaths, or a fatality-rate of 25·5 per cent. In only 25 instances was it thought that improvement resulted. In 2 cases manganese was tried, 1 died and the other recovered.

Neokharsivan.

The organic arsenical preparations cannot, any more than the metals, be considered to act by sterilising the blood stream, but possibly by stimulating leucocytic formation, and so helping to produce more anti-bodies. This preparation certainly helps in the profound anæmia which one so frequently sees in serious puerperals. Colebrook thinks it has a specific effect on haemolytic streptococci. 36 cases had the drug alone, and in 14 instances with other forms of treatment.

Of these 50 cases, 10 or 20 per cent. died, the lowest death-rate in the series of cases. 0·6 gm. was given once a week.

In view of Colebrooke's latest work concerning the degenerative changes produced on leucocytes by large doses of organic arsenic, it would appear that smaller doses of the lesser toxic preparations at shorter intervals would be more advisable.

Other Drugs.

In 19 cases, with 6 deaths, mercurosal, sodium salicylate, and septicamine were tried. Mercurosal is a mercurial preparation, and was given in 5 cases alone, which recovered. The dose of 0·1 gm. was given on alternate days. Severe diarrhœa often occurs after mercurosal.

In 121 other cases, with 37 deaths, or a fatality rate of 30·5 per cent. many other drugs were tried. The principal were quinine, neuclein, sodium citrate, soamin, salicine, and organic glandular products. The multiplicity of the remedies used is a good indication of their value. 4 had protein shock, with one death. 31 patients, with 17 deaths, had no drugs.

The following table shows the numbers treated in various ways with the percentage death-rates. The total death-rate is 31 per cent., and, although some of the members are small, the different rates are very close.

Disregarding the small vaccine group, the organic arsenic group gave the lowest figure—20 per cent.

The conclusion come to is that none of the methods tried was superior to the others.

A death-rate of 31 per cent. is high, and may be partly explained by the following factors:—

- (a) The cases are drawn from a wide county area.
- (b) The late day of disease on admission.
- (c) Clinical cases only are included in calculating the death-rate. Cases such as mastitis, pelvic cellulitis, and thrombosis admitted 21 days after confinement are excluded.

Remedy	Recovered	Died	Recovered	Died	Death Rate
Anti-streptococcal serum, ...	33	14	}	54	31·6
Do. do. and others, ...	21	11			
Puerperal serum, ...	3	1	}	3	40·0
Do. do. and others, ...	—	1			
Scarlet fever antitoxin, ...	29	15	}	31	38·0
Do. do. and others, ...	2	4			
P. D. & Co.—			}	5	50·0
Experimental serum, ...	5	2			
Do. do. and others, ...	—	3			
No. serum alone, ...	...	...	70	32	31·3
Do. and others, ...	...	...	32	21	39·6
Totals, ...	...	...	102	53	34·2

Remedy				Recovered	Died	Recovered	Died	Death Rate
Vaccines,	...	...	...	9	2	9	2	18·1
Eusol,	...	...	...	34	26	34	26	43·3
Collosal iodine,	...	...	...	61	21	73	25	25·5
Do. and others,	...	...	...	12	4			
Neokharsivan,	...	...	...	30	6	40	10	20·0
Do. and others,	...	...	...	10	4			
Others, intravenous,	...	...	...	13	6	13	6	31·5
Drugs, intravenous,	...	...	...	...	...	160	67	29·5
Others, mouth, &c.,	...	...	...	84	37	84	37	34·4
Total,	...	...	...	...	...	364	157	31·0

General Treatment Common to all Cases.

In addition to the foregoing so-called specific remedies, general treatment and, particularly, good nursing, is of the greatest importance.

Rest is the first essential to allow the defective protective elements full play to fight the infection.

The patient is placed in the Fowler position immediately. Lying on the face two or three times a day for short periods, when there is difficulty in keeping the patient in the upright position, is useful.

Quinine and strychnine have been given as a routine with the object of helping involution of the uterus. At an early stage the bowels are cleaned out, a loaded rectum prevents drainage of the uterus.

Calomel, gr. 5, with an enema, 6 hours after, is usually effective.

For hyperpyrexia, sponging is relied upon. The only drug used for lowering temperature was aspirin compound, which also quiets restless patients.

Sleep should be obtained at all costs, chloral and bromide, paraldehyde and morphine are relied upon.

Profound anæmia from blood destruction is a feature in the fatality rate. Many times a blood count of less than 2,000,000 was seen.

I am satisfied that organic arsenic is useful for this purpose. Iron and arsenic were used in the milder cases.

Saline infusions have been extensively used, intravenously and subcutaneously, for exhausted patients, and where urinary elimination was defective.

Conclusions.

From the above short review of the various forms of treatment tried and keeping before us the fallacies of statistics, we can come to no other conclusion than that the true remedy for severe established puerperal sepsis is still to be discovered.

The value of treatment may be more or less summarised as follows :—

- (1) The mild early infections will recover with simple treatment.
- (2) The severe late septicæmias will die.
- (3) A middle group where our remedies and especially skilled hospital nursing may turn the balance to the right side.

Much better results would be got if patients were sent into hospital early. Although the cases under review have been ill at home for nearly 10 days on an average, nothing in the way of treatment had been undertaken in the large majority. The cases are kept lying on their backs; their skins are filthy; the vaginal discharge is profuse and foul, bowels overloaded, and no sleep for days. As already said, 47 were admitted moribund.

If simple common-sense remedies were applied, when the temperature goes to 99°—such as the Fowler posture, cleanliness, an early intra-uterine douche, with an injection of glycerine, and a purge—better results would be got, and many more cases would never go on to the septicæmic stage.

Erysipelas.

7 cases were in hospital at the beginning of the year, 47 were admitted, and 7 were wrongly diagnosed. Of these 47 cases, 41 recovered, 4 died, and 2 were in hospital at the end of the year.

SEX.—Male, 28; female, 17.

TYPE OF DISEASE.—Mild, 23; moderate, 14; severe, 8.

SITUATION OF DISEASE.—Face, 32; face and scalp, 1; scalp, 1; arm, 3; leg, 7; wandering, 1.

THE AVERAGE AGE was 38 years; the average duration of illness prior to admission was 5·3 days; the average residence of all cases was 31·4 days; of recovered cases, 31 days; and of fatal cases, 40 days.

THE FATALITY RATE was 8·8 per cent. of the cases discharged.

COMPLICATIONS.—Cellulitis, 1; miscarriage, 1; relapse, 1.

PREVIOUS CONDITIONS.—Diabetes, 1; nephritis, 1; positive Wassermann, 1.

CORRECTED DIAGNOSES.—Alveolar abscess, 1; cardiac disease, 1; cellulitis, 1; otitis media, 1; periostitis, 1; rheumatism, 1; scarlet fever, 1.

Tuberculosis.

One case of tuberculosis was in hospital at the beginning of the year; 69 were admitted, 16 were wrongly diagnosed, and 14 others proved to be cases of tuberculosis. Of these 68 cases, 53 were discharged in varying stages of improvement, 14 died, and 1 was in hospital at the end of the year.

The following table shows the age-periods and sexes of the cases discharged :—

AGE.	RECOVERED.		DIED.		TOTAL.	
	Males.	Females.	Males.	Females.	Males.	Females.
-5 years, -	6	4	6	1	12	5
- 10 „ -	4	5	3	2	7	7
- 15 „ -	7	2	—	2	7	4
- 20 „ -	5	5	—	—	5	5
- 25 „ -	1	4	—	—	1	4
- 30 „ -	2	2	—	—	2	2
- 35 „ -	—	—	—	—	—	—
- 40 „ -	—	—	—	—	—	—
Over 40 „ -	1	5	—	—	1	5
	26	27	9	5	35	32

SEX.—Male, 35; female, 32.

THE AVERAGE AGE was 12·3 years, and the average residence was 46·4 days.

CLASSIFICATION OF CASES.

Glands, - - -	35	General, - - -	3
Bone, - - -	3	Meningeal, - - -	9
Joint, - - -	2	Pulmonary, - - -	7
Spine, - - -	1	Skin, - - -	1
Abdomen, - - -	1	Others, - - -	5

GLANDULAR TUBERCULOSIS.—35. Males, 16; females, 19.

The average age was 12·6 years, and the average duration of residence 48·7 days.

In 3 cases the intact mass was excised, while 29 others had sinuses and abscesses cleared out.

OSSEOUS TUBERCULOSIS.—3. Males, 2; female, 1.

The average age was 33·3 years, and the average residence in hospital was 41 days. The bones affected were:—tibia, 1; femur, 1; tibia and ulna, 1.

ARTICULAR TUBERCULOSIS.—2.

A male, aged 16 years, had advanced disease of elbow, wrist, and ankle joints, with sinus formation. After the granulation tissue was cleared away, improvement was rapid. He was transferred to a sanatorium for convalescence.

A male, aged 30 years, suffered from extensive disease of the carpal joints. Treatment resulted in ankylosis.

SPINAL TUBERCULOSIS.—1. A male, aged 7 years, had a psoas abscess.

ABOMINAL TUBERCULOSIS.—1. A male, aged 7 years, died from advanced abdominal tuberculosis.

GENERAL TUBERCULOSIS. — 3. 2 males and 1 female died from generalised tuberculosis. 2 were aged 2 years, and one 6 years of age.

MENINGEAL TUBERCULOSIS.—9. 6 males and 3 females died from tubercular meningitis. The average age was 5·7 years, the average day of disease, 9·3 days, and the average residence, 8·1 days.

PULMONARY TUBERCULOSIS.—7 SEX.—Male, 1; female, 6. The average age was 30·8 years, and the average stay in hospital was 45·2 days.

SKIN TUBERCULOSIS.—A girl, aged 16 years, had extensive lupus of the face of several years' duration. The lesions were thoroughly scraped. She was apparently cured after a residence of 164 days.

OTHER TUBERCULOSIS. — 5. Epididymis, 1, excised; keratitis, 1, healed, small opacity remaining; ischio-rectal abscess, 1, cured; mediastinal tuberculosis, 1; for X-ray examination, 1.

FATAL CASES.—SEX.—Male, 9; female, 5. The average age was 6.1 years, and the average residence, 31.1 days.

Type of Disease. — Meningeal, 9; pulmonary, 1; abdominal, 1; general, 3.

CORRECTED DIAGNOSES.—Bursitis, 1; cerebral diplegia, 1; malnutrition, 1; sinus septic, 1; pyogenic abscesses, 9; rodent ulcer, 3.

OTHERS WHICH PROVED ON OBSERVATION TO BE TUBERCULOSIS.—Cerebro-spinal fever, 3; diphtheria, 1; encephalitis lethargica, 2; enteric fever, 1; influenza, 1; measles, 1; observation, 2; pneumonia, 3.

Pneumonia.

20 cases were in hospital at the beginning of the year; 259 were admitted, of which 84 were wrongly diagnosed, and 9 cases notified as suffering from other diseases proved to be cases of pneumonia. Of these 204 cases, 135 recovered, 41 died, and 28 were in hospital at the end of the year.

The following table shows the age-periods and the sex of the cases discharged :—

AGE.	RECOVERED.		DIED.		TOTAL.	
	Males.	Females.	Males.	Females.	Males.	Females.
- 5 years, - -	22	18	8	7	30	25
- 10 „ - -	11	12	1	1	12	13
- 15 „ - -	6	2	1	—	7	2
- 20 „ - -	15	3	—	1	15	4
- 25 „ - -	9	1	3	1	12	2
- 30 „ - -	3	2	1	—	4	2
- 35 „ - -	5	5	1	—	6	5
- 40 „ - -	1	2	5	2	6	4
Over 40 „ - -	12	6	8	1	20	7
	84	51	28	13	112	64

CLASSIFICATION OF DISEASE.—Acute lobar pneumonia, 117; broncho-pneumonia, 49; influenzal pneumonia, 3; unresolved pneumonia, 3; hypostatic pneumonia, 2; convalescent pneumonia, 1; traumatic pneumonia, 1.

TYPE OF DISEASE.—Mild, 44; moderate, 52; severe, 80.

THE SITUATION OF THE LESION in the 117 lobar cases was as follows:—Whole of both sides, 4. Right side—Base, 51; apex, 9; whole, 6; middle, 1. Left side—Base, 42; apex, 2; whole, 2.

THE FATALITY RATE was 23·2 per cent.

COMPLICATIONS.—31, or 17·6 per cent. of the discharges, had one or more complications. These were:—Arterio-sclerosis, 2; effusion, 6; empyema, 12; glycosuria, 1; jaundice, 1; otitis media, 3; parotitis, 1; pericarditis, 1; relapse, 1; thrombosis leg, 1; thrombosis pulmonary, 1; thyroiditis, 1.

OTHER CONDITIONS.—After measles, 3; incubating measles, 1.

CORRECTED DIAGNOSES.—Abscess, 1; appendicitis, 1; bronchitis, 30; cardiac disease, 9; cerebro-spinal fever, 2; constipation, 1; effusion, 4; empyema, 6; febricula, 2; hyperemesis gravidarum, 1; influenza, 3; malnutrition, 5; negative, 7; nephritis, 2; pneumococcal meningitis, 1; tapeworm, 1; tuberculosis, 3; tumour lung, 1; tumour meninges, 1; puerperal fever, 1; pulmonary fibrosis, 1; pyelitis, 1.

CASES WHICH PROVED TO BE PNEUMONIA on observation were admitted to hospital as:—Continued fever, 1; diphtheria, 1; effusion, 1; encephalitis lethargica, 2; empyema, 2; otitis media, 1; whooping cough, 1.

Measles.

11 cases were admitted, one was wrongly diagnosed, and 1 other proved to be a case of measles. 6 recovered, 1 died, and 4 were in hospital at the end of the year.

SEX.—Male, 3; female, 4. 3 were adults and 4 children.

THE AVERAGE DAY OF ILLNESS was 5·1 days, and the average duration of residence, 42 days.

TYPE.—Mild, 3; moderate, 2; severe, 2.

THE FATAL CASE died from suffocative bronchitis.

COMPLICATIONS.—Diphtheria, 1; pneumonia, 1. 1 case was incubating whooping cough.

CORRECTED DIAGNOSIS.—General tuberculosis, 1.

One case notified as measles proved to be scarlet fever.

Whooping Cough.

1 case was in hospital at the beginning of the year, 20 were admitted, 4 were wrongly diagnosed, and 2 others proved to be whooping cough. Of these 19 cases, 15 recovered, 3 died, and 1 was in hospital at the end of the year.

AGES.—All were under 9 years of age, with the exception of 1 adult. The average age was 5 years.

SEX.—Male, 7; female, 11.

THE AVERAGE DAY OF DISEASE was 13 days, and the average residence, 38.1 days.

TYPE.—Mild, 5; moderate, 6; severe, 7.

COMPLICATIONS.—Broncho-pneumonia, 1; marasmus, 2.

CORRECTED DIAGNOSES.—Bronchitis, 1; broncho-pneumonia, 1; negative, 1; rickets, 1.

The 2 cases, which proved to be whooping cough, were notified as diphtheria.

CONCURRENT INFECTION.—Whooping cough and chickenpox, 1.

TREATMENT.—The early cases were treated with whooping cough vaccine, and the late ones with whooping cough immunogen.

Encephalitis Lethargica.

Of 15 cases notified as encephalitis lethargica, only 4 were true cases. 1 other case was notified as food poisoning. 4 of the patients were of the Parkinson type of several years' duration, and 1 was a mild case of recent origin. All the patients were males. The Parkinson cases went out much the same as when admitted; the mild case apparently recovered.

CORRECTED DIAGNOSES.—Constipation, 1; dementia, 2; neurasthenia, 1; headache, 1; negative, 3; cerebral hæmorrhage, 2; necrosis heart muscle, 1.

Meningitis.

CEREBRO-SPINAL MENINGITIS.—5 cases were notified, 1 of which proved a meningismus. 2 others were notified as pneumonia. The 6 proved cases were fatal.

AGES.—3 were under 1 year, 1 between 1 and 2 years, and the remaining 2 were 17 and 34 years respectively.

SEX.—Male, 4; female, 2.

THE AVERAGE DAY OF ILLNESS was 12 days, and the average duration of residence, 8·8 days.

PNEUMOCOCCAL MENINGITIS.—A female, under 1 year of age, had been ill for 8 days before coming into hospital. She died after 3 days' residence from a pneumococcal infection of the meninges.

INFLUENZAL MENINGITIS.—A female, aged 2 years, was notified as encephalitis lethargica, and died from influenzal meningitis.

OTHERS.—3 others were notified as meningitis, but proved negative.

Tetanus.

Case 1.—A male, aged 56 years, while working in the garden, punctured his finger with a piece of wire. Within one week signs of the disease appeared. Two days later he was admitted to hospital with severe tetanus. He died in other two days.

Case 2.—A male, aged 18 years, after doing some work in his garden, accidentally injured his leg with a poker. The wound was not in any way cleaned, and after an incubation period of less than a week he showed signs of trismus. He was left at home for 5 days. When he came under observation the tetanic convulsions were severe, and he died in two days.

One other case was notified as tetanus, but proved negative.

Tinea Tonsurans.

7 males and 4 females had the head X-rayed for long-standing ringworm. All were cured.

4 males and 1 female were cured for thallium acetate.

THALLIUM ACETATE TREATMENT.

Ringworm of the scalp is a condition which gives rise to much trouble among practitioners. The application of antiseptics and ointments usually results in failure from imperfect directions and carelessness on the part of parents in applying the remedies. The use of X-ray in skilled hands can in the vast majority of cases produce a cure by complete epilation. There are, however, a few disadvantages. X-rays cannot be used in very young children, nor is it advisable to X-ray a highly inflamed head. In addition, some parents refuse permission because of the slight risk of permanent baldness.

The drug thallium acetate given by the mouth can produce epilation as effectively as X-rays. The child is carefully weighed, 8.5 mgm. per kilo of body weight is an effective dose. The hair loosens in about 10 days, and is usually well out in 20 days.

Although toxic signs, such as joint pains and albuminuria, have been described, the 10 cases in which the remedy has been tried have epilated completely without after effects.

Vincent's Angina.

An interesting outbreak occurred in Calderbank Hospital among young children of the marasmic type. The first case, which died there, was the probable origin. There was ulceration of the tonsils, marked fœtor, and glandular enlargement. The 12 secondary cases admitted here were not true anginas, but more an ulcero-stomatitis due to the same organisms. In all the cases the organisms were found in abundance chiefly on the spongy gums. In 3 of the cases the organism was extremely difficult to eradicate.

The treatment employed was powdering the parts with dry neokharsivan. In 3 persistent cases neokharsivan was given intramuscularly.

Ludwig's Angina.

A male, aged 48 years, was notified as diphtheria. He had been ill for four days with sore throat, headache, and difficulty in swallowing. On admission he was seriously ill and very septic looking. The fauces and tonsils were red, swollen, and extremely painful. The neck on either side of the larynx was tender, and just beginning to appear red. Although he had marked difficulty in swallowing, the breathing was not much interfered with. Next day

the neck got much more tender and red, and the breathing had become difficult. Tracheotomy was performed, and multiple incisions on either side of the neck revealed only serous fluid containing streptococci. The patient got gradually weaker, and died next day from cardiac failure.

The temperature remained about 103·2°F., and the pulse 140, in spite of large doses of streptococcal antitoxin. Swabs from the throat and wounds showed streptococci.

The rarity of the condition and its extreme urgency in fever work justify reporting the three other cases which occurred in the hospital practice during the last 15 years.

A male, aged 48 years, was notified as laryngeal diphtheria. On 22nd December, 1924, he complained of pain in the neck and difficulty in breathing. Next day he was admitted to hospital extremely ill, with marked obstruction to the breathing, pulse 120, and temperature 99·8°F. On either side of the larynx was marked tenderness and a suspicion of fullness, but no redness. Immediate tracheotomy was performed first, then multiple incisions on either side of the neck, opening up the deep fascia. No pus was obtained. He rapidly improved, and although he developed a pneumonic patch at the right base, he was discharged well after a residence of 41 days. No organism was recovered.

A male, aged 20 years, was admitted to hospital on the 6th November, 1923, as a cellulitis of the neck. He had been ill 5 days with sore throat, headache, sickness, and nasal discharge. He came under observation desperately ill, cyanotic, tongue protruding, swollen, and fixed between the teeth. The odour from the mouth was overpowering. Under the chin, extending to the cricoid cartilage, and fading laterally into the neck, was a tender, brawny swelling. Immediate tracheotomy relieved the breathing, then multiple incisions revealed a small quantity of pus in the middle line. The temperature on admission was 101°F., but dropped to normal next day. The wounds healed up rapidly, and he was discharged in 30 days. Streptococci were present in the wounds. He had 75 c.c. of polyvalent streptococcal serum.

A male, aged 46 years, was also notified as cellulitis of the neck. On the 8th April, 1924, swelling of the neck was noted; on 12th April, 1924, he was shivering and delirious. He was admitted on the 13th

April, 1924, *in extremis* from dyspnœa. There was only slight tenderness and fullness of the right side of the neck. The fauces were deeply congested, and suggested faucial erysipelas. This case was so ill that tracheotomy had to be performed with the patient in the sitting posture. When the deep fascia was opened pus was got in front of the vertebral column. Streptococci were the causal organisms. Next day the patient was quite comfortable, and went out in 30 days.

Ludwig's angina is an acute and serious condition, and will carry off the patient unless the treatment is energetic. By the time the breathing is affected the patient is seriously ill, and should have tracheotomy performed immediately. The local condition may be misleading. Tenderness on pressure and slight fullness may be the only local signs. After the tracheotomy tube is inserted the deep fascia should be opened up in many places, although no pus is obtained. Chloroform should not be given for the tracheotomy.

Spirochætosis Ichtero Hæmorrhagica.

2 cases were notified. 1 proved to be catarrhal jaundice and the other influenza.

Venereal Diseases.

At the beginning of the year 8 cases were in residence. Throughout the year 105 cases were admitted for indoor treatment. Of these, 31 were wrongly diagnosed; and 3 patients, notified as other diseases, proved to be cases of venereal disease. Of 85 cases, 76 were discharged in varying stages of improvement, 3 died, and 6 were in hospital at the end of the year.

SEX.—Male, 38; female, 41.

AGE.—Under 1 year, 9; 2 to 10 years, 3; 11 to 20 years, 11; 21 to 30 years, 37; 31 to 40 years, 12; 41 to 50 years, 2; over 50 years, 5.

The average age of the proved cases was 24·2 years; and the average duration of residence 37·4 days.

The indoor cases were:—Syphilis, 14; gonorrhœa, 50; syphilis and gonorrhœa, 2; soft sores, 2; ophthalmia neonatorum, 8; paraphimosis, 2; phagedæna, 1.

CORRECTED DIAGNOSES.—Balanitis (simple), 1; blepharitis, 2; cancer jaw, 1; cancer stomach, 1; dermatitis, 2; eczema, 1; empyema, 1; impetigo, 1; jaundice, 1; marasmus, 2; negative, 9; ophthalmia (simple), 3; rheumatoid arthritis, 1; scabies, 1; ulcer scrotum, 1; vaginitis (simple), 3.

Others which proved to be cases of venereal disease were:—Scarlet fever, 2; tuberculosis, 1.

COMPLICATIONS AND REASONS FOR INDOOR TREATMENT.—Abscesses, 4; arthritis, 4; broncho-pneumonia, 1; copaiba rash, 2; epididymitis, 4; otitis media, 1; phagedæna, 1; pyelitis, 1; stone in kidney, 1; warts, 2.

OPHTHALMIA NEONATORUM.—8 cases were treated, 6 were cured, 1 had impairment of vision in one eye, and 1 impairment in both eyes.

The number and nature of the cases attending at the outdoor clinic and the areas from which they came are shown in the following table. 310 new cases were registered—234 males and 76 females.

VENEREAL DISEASES, 1927.

	Syphilis.	Gonorrhœa.	Syphilis and Gonorrhœa.	Soft Sore.	Others V. D.	Others Non V. D.	Total.	Indoor Cases.	Indoor Days.	Outdoor Attendances
Middle Ward, -	55	102	2	1	5	47	211	52	1,682	2,501
Upper Ward, -	1	13	—	—	—	7	21	13	373	139
Lower Ward, -	—	4	—	—	—	1	5	4	260	13
Airdrie, -	—	2	—	—	—	1	3	2	37	35
Coatbridge, -	11	8	2	—	—	4	25	9	512	197
Hamilton, -	14	24	1	—	1	14	54	16	527	589
Kirkintilloch, -	—	1	—	—	—	—	1	1	44	—
Lanark, -	1	2	—	—	—	1	4	—	—	16
Motherwell and Wishaw, -	31	48	2	—	2	24	107	12	237	1,861
Rutherglen, -	1	—	—	—	—	1	2	1	8	3
Glasgow, -	—	1	—	—	—	—	1	—	—	1
Peebles, -	1	—	—	—	—	—	1	1	96	—
Stirlingshire, -	—	—	—	—	—	1	1	1	8	—
Total, -	115	205	7	—	8	101	436	112	3,784	5,355

The following is a synopsis of the venereal diseases work since 1920 :—

	1920		1921		1922		1923		1924		1925		1926		1927	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>New Cases :—</i>	434	116	315	88	214	79	171	45	163	55	191	68	158	52	234	76
Syphilis, - -	124	64	107	31	49	36	48	15	34	19	35	24	20	8	24	16
Gonorrhœa, -	150	12	103	22	75	14	68	10	76	21	108	32	78	27	126	39
Syphilis and Gonorrhœa, -	22	2	9	7	4	1	4	5	1	1	—	2	—	2	2	3
Soft Sore, -	10	—	1	—	2	—	9	—	—	—	—	—	—	—	—	—
Others V.D., -	13	4	5	1	5	1	7	—	5	—	6	1	2	—	7	—
Others Non V.D.,	114	34	90	27	79	27	35	15	47	14	42	9	58	15	75	18
<i>Cases treated during Year :—</i>																
Syphilis, - -	257	134	252	102	176	91	162	63	123	56	88	43	88	32	71	44
Gonorrhœa, -	186	12	146	24	123	16	100	13	99	22	137	48	106	42	157	48
Syphilis and Gonorrhœa, -	44	7	35	11	24	6	24	10	12	5	6	4	4	3	4	3
Soft Sore, -	10	—	3	—	4	—	8	—	2	—	—	—	1	—	—	—
Others V.D., -	14	4	5	1	7	1	8	—	8	—	4	—	6	—	8	—
Others Non V.D.,	115	40	102	29	19	3	48	20	48	17	51	12	60	15	83	18
Outdoor Attend- ances, - -	7505	237	6539	687	3536	706	3270	599	3174	411	5531	1167	3070	747	4518	837
Indoor Cases, -	64	60	64	61	46	44	50	42	41	32	53	61	44	47	55	57
Indoor Days, -	1219	1308	1820	1485	1030	1767	1475	1264	1044	1110	1702	1846	1268	1399	1404	2380
Salvarsan Sub- stitute Injec- tions, - -	1779	707	1701	645	1092	664	1358	460	594	240	910	407	812	401	926	650
No. of Operations	27	—	19	—	10	1	14	1	10	—	8	1	6	—	12	2
„ Wassermann,	882	318	869	267	570	224	424	131	269	91	172	64	165	69	198	127
„ Smears Spiro- chætes,	64	—	35	1	18	—	19	—	7	—	6	—	1	—	3	—
„ „ Gonococci,	224	27	181	44	163	36	171	35	138	53	126	71	51	39	144	86

Note.—Included under Salvarsan Substitute Injections are 632 Bismuth Injections.

Miscellaneous Cases discharged during 1927.

	Rec.	Died		Rec.	Died
Abscesses,	3	—	Impetigo,	2	—
Albuminuria,	1	—	Influenza,	3	—
Bronchitis,	3	—	Negative,	1	—
Bursitis,	2	—	Nephritis chronic, ...	1	—
Carbuncle,	1	—	Otitis media,	1	—
Cardiac disease,	1	1	Osteomyelitis,	1	1
Cellulitis,	3	—	Pancreatitis (acute), ...	—	1
Cerebral hemorrhage, ...	1	—	Pemphigus,	1	1
Chickenpox,	2	—	Polomyelitis,	1	—
Cold,	1	—	Purpura hæmorrhagica,	1	—
Conjunctivitis,	1	—	Pyæmia,	—	1
Cyst turbinate,	1	—	Pyosalpinx,	1	—
Dermatitis,	4	—	Rheumatism chronic,	1	—
Dysmenorrhœa,	1	—	Sarcoma,	—	1
Eclampsia,	—	1	Scabies,	28	—
Effusion pleural,	3	—	Septicæmia,	—	1
Empyema,	6	2	Sore throat,	22	—
Epilepsy,	1	—	Tonsillar abscess, ...	2	—
Gastritis,	1	—	Trachoma,	1	—
Gastro-enteritis,	2	—	Tracheotomy sinus, ...	1	—
Hydrocele,	1	—	Uræmia,	—	1

Electrical Department.

During the year 603 cases were photographed. These were :—Chest, 459; chest and other parts, 14; spine, 24; pelvis, 8; kidney, 7; skull, 1; bones, 22; joints, 38; abdomen, 11; fractures, 15; barium meals, 4.

The sources from which the 603 cases came were :—County Hospital, Motherwell, 125; Cambuslang Dispensary, 110; Bellshill Dispensary, 86; Blantyre Dispensary, 42; Shotts Dispensary, 46; Bellshill Hospital, 3; Lightburn Hospital, 14; Longriggend Sanatorium, 90; Shotts Sanatorium, 46; Lower Ward, 6; Middle Ward (others), 11; Upper Ward, 10; Doctors, 8; V.D. Centres, 6.

X-RAY TREATMENT.—The following conditions were treated by X-rays :—Tinea tonsurans, 11; epithelioma, 1; laryngeal stenosis, 1; tubercular glands, 1.

Operations.

During the year the following operations were performed in the hospital :—

DISEASE.		OPERATION.	RECOVERED.	DIED.	TOTAL.
Tuberculosis	Glands	Excision or scraping	32	—	32
	Bone	Scraping sinuses, &c.	5	—	5
	Joints	Arthrotomy	2	—	2
	Ischio-rectal	Opening abscess	2	—	2
	Testicle	Excision	1	—	1
	Lupus	Scraping	1	—	1

DISEASE.		OPERATION.	RECOVERED.	DIED.	TOTAL.
Diphtheria	Laryngeal stenosis	Tracheotomy	4	2	6
	Carrier	Tonsillectomy	8	—	8
	Suppurative adenitis	Opening	1	—	1
Scarlet Fever	Suppurative adenitis	Opening	8	—	8
	Mastoiditis	Mastoidectomy	1	—	1
	Large tonsils	Tonsillectomy	9	—	9
	Laryngeal stenosis	Tracheotomy	1	—	1
Erysipelas	Cellulitis	Opening	1	—	1
Puerperal Fever	Pelvic abscess	Laparotomy	1	—	1
	Peritonitis	Laparotomy	—	2	2
	Hip-joint	Opening	2	—	2
	Mastitis	Opening	2	—	2
	Phlegmasia	Opening	1	—	1
	Empyema	Resection of rib	1	—	1
Venereal Diseases	Phimosis	Circumcision	8	—	8
	Warts	Excision	2	—	2
	Abscesses	Opening	3	1	4
Pneumonia	Empyema	Resection of rib	20	3	23
Others	Abscesses	Opening	8	—	8
	Bursitis	Opening	1	—	1
	Cellulitis	Incision	2	—	2
	Cyst nose	Removal	1	—	1
	Ectopic pregnancy	Laparotomy	1	—	1
	Hydrocele	Removal	1	—	1
	Large tonsils	Tonsillectomy	1	—	1
	Osteomyelitis	Opening	—	1	1
	Pyæmia	Opening abscess	1	—	1
	Rheumatism	Extraction of teeth	1	—	1
			133	9	142

The following operations and consultations were undertaken by the consulting staff :—

Dr. Maclellan, Surgeon.—Laparotomy, 1; excision of glands, 1; consultation, 1.

Dr. Cameron, Gynæcologist.—Laparotomy, 3; consultation, 2.

Dr. Adams, Otologist.—Tonsillectomy, 15; cyst nose, 1; lipoidal injection, 1.

Dr. Mortimer, Ophthalmologist.—Consultation, 5.

Dr. Harrington, Physician.—Consultation, 2.

Dr. Brown, Dermatologist.—Consultation, 2.

The Staff.

On 31st December, 1927, the indoor staff comprised 1 physician-superintendent, 2 assistant medical officers, 1 matron, 11 sisters, 62 probationers, and 39 maids.

The outdoor staff consisted of 1 engineer, 3 firemen, 1 gardener, 5 assistant gardeners, 2 chauffeurs, 1 V.D. attendant, 1 X-ray attendant, and 2 clerks.

The total staff numbered 132.

LECTURES.—From October till April lectures and demonstrations on elementary anatomy and physiology, hygiene, fevers, the theory and practice of nursing, and medical and surgical nursing, in accordance with the syllabus of the General Nursing Council, were given by the medical staff and matron. The course in cooking and dietetics was given by the Education Authority.

STAFF ILLNESSES.—Abscess, 2; albuminuria, 1; bursitis, 2; chronic nephritis, 1; conjunctivitis, 1; dysmenorrhœa, 1; epilepsy, 1; gastritis, 1; influenza, 2; nasal obstruction, 1; phthisis, 1; pneumonia, 2 (1 died); rhinitis, 1; scarlet fever, 3; sore throat, 22; tonsillar abscess, 1.

The sick staff lost 803 working days.

INOCULATIONS.—16 probationers were vaccinated with T.A.B. vaccine against the enteric group of diseases.

107 of the staff were “Schicked” and “Dicked” with the following results:—67, or 62.6 per cent., were negative to both tests; 9 were positive to both; 27 were Schick positive, and 4 Dick positive.

IMMUNISATION.—10 of the staff, including 1 from last year, were immunised against diphtheria and scarlet fever, 23 against diphtheria, and 3 against scarlet fever.

No member of the staff was infected with diphtheria. 3, however, took scarlet fever. 2 of these were infected before being tested. The other had been “Dicked,” found positive, and had an immunising course. This nurse was still positive 3 months after her attack of scarlet fever. When tested 5 months later the Dick Test was negative.

Ambulance Work.

	Admissions.	Discharges.	Tuberculosis.	Disinfections.	Others.	Total.
Patients, -	1,391	580	473	—	9	2,453
Journers, -	1,265	248	185	27	48	1,773
Mileages, -	18,291	5,725	6,407	348	855	31,626

Statistics.

TABLE I.—ADMISSIONS (AS NOTIFIED) AND DISCHARGES DURING 1927,
WITH THE NUMBERS IN HOSPITAL AT THE BEGINNING AND END OF
THE YEAR.

Disease.	In Hospital, 1st January, 1927.		Admitted.		Discharged.				Remaining in Hospital 31st Dec., 1927.	
	M.	F.	M.	F.	Recovered.		Died.		M.	F.
					M	F.	M	F.		
Scarlet Fever, - -	54	76	165	287	199	324	2	3	18	36
Diphtheria, - - -	25	37	200	219	186	226	7	4	32	26
Enteric Fever, - -	—	1	5	4	3	3	2	1	—	1
Erysipelas, - - -	4	3	26	21	27	20	2	3	1	1
Puerperal Fever, - -	—	9	—	88	—	63	—	25	—	9
Tuberculosis, - - -	—	1	36	33	32	32	4	1	—	1
Measles, - - - -	—	—	6	5	2	3	2	—	2	2
Whooping Cough, -	—	1	9	11	9	8	—	3	—	1
Venereal Disease, - -	5	3	47	58	48	55	1	3	3	3
Pneumonia, - - -	10	10	165	94	123	75	33	20	19	9
Others, - - - -	4	3	94	100	78	83	16	10	4	10
	102	144	753	920	707	892	69	73	79	99
	246		1,673		1,599		142		178	
	1,919				1,919					

TABLE II.—ADMISSIONS AND DISCHARGES IN EACH MONTH
OF THE YEAR 1927.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admitted, - -	164	134	148	99	114	118	97	104	129	232	148	186	1,673
Discharged—													
Recovered, - -	154	147	177	104	105	106	110	70	98	137	180	211	1,599
Died, - - -	12	8	22	12	13	15	8	6	10	9	12	15	142

TABLE III.—AGE AND SEX OF PATIENTS DISCHARGED DURING THE YEAR 1927, WITH THE FATALITY RATE.

SCARLET FEVER.

Age.	Male.			Female.			Total.		
	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.
0-1,	—	—	—	1	1	50·0	1	1	50·0
-2,	9	—	—	6	—	—	15	—	—
-3,	9	—	—	11	—	—	20	—	—
-4,	18	—	—	22	—	—	40	—	—
-5,	14	—	—	22	—	—	36	—	—
-6,	15	—	—	29	—	—	44	—	—
-7,	23	—	—	33	1	2·9	56	1	1·7
-8,	17	—	—	18	1	5·2	35	1	2·7
-9,	10	—	—	32	—	—	42	—	—
-10,	11	—	—	21	—	—	32	—	—
15,	32	—	—	62	—	—	94	—	—
-20,	7	—	—	16	—	—	23	—	—
Over 20,	6	—	—	21	—	—	27	—	—
Total, - -	171	—	—	294	3	1·01	465	3	0·64

TABLE III. (*contd.*)—DIPHTHERIA.

Age.	Male.			Female.			Total.		
	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.
0-1,	1	—	—	—	—	—	1	—	—
-2,	3	1	25·0	5	—	—	8	1	11·1
-3,	13	—	—	6	—	—	19	—	—
-4,	19	1	5·0	13	—	—	32	1	3·1
-5,	14	—	—	13	—	—	27	—	—
-6,	18	2	10·0	14	1	6·6	32	3	8·5
-7,	10	—	—	20	—	—	30	—	—
-8,	16	—	—	17	—	—	33	—	—
-9,	5	—	—	9	—	—	14	—	—
-10,	5	—	—	11	1	8·3	16	1	5·8
-20,	25	—	—	34	—	—	59	—	—
Over 20,	2	—	—	7	1	12·5	9	1	10·0
Total,	131	4	2·9	149	3	1·9	280	7	2·4

TABLE IV.—THE STAGE OF THE DISEASE IN WHICH PATIENTS DISCHARGED IN 1927, WERE ADMITTED TO HOSPITAL.

Disease.	Days of 1st Week.							Week of Illness.				Total.
	1	2	3	4	5	6	7	1st.	2nd.	3rd.	4th	
Scarlet Fever, - -	13	129	118	86	44	29	7	426	22	20	—	468
Diphtheria, - - -	19	79	68	55	25	21	5	272	14	1	—	287

TABLE V.—COMPLICATIONS OBSERVED IN PATIENTS DISCHARGED DURING 1927.

Scarlet Fever.	Suppurative Cervical Adenitis.	Non-Suppurative Cervical Adenitis.	Otitis Media Purulenta.	Rhinorrhoea.	Cardiac Complications.	Nephritis.	Arthritis.	Mastoiditis.	Pulmonary Complications.	Skin Conditions.
In 465 Recovered Cases,	3	91	38	60	4	3	13	1	2	2
In 3 Fatal Cases, -	—	—	—	1	—	—	—	—	—	1
In 468 Cases, - -	3	91	38	61	4	3	13	1	2	3
Percentage, - - -	0·6	19·4	8·1	13·0	0·4	0·6	2·7	0·2	0·4	0·6

Diphtheria.	Adenitis.	Rhinitis.	Otitis Media.	Cardiac Involvements.	Broncho-Pneumonia.	Bronchitis.	Paralysis.	Arrhythmia.	Nephritis.	Albuminuria.
In 280 Recovered Cases,-	10	5	6	—	—	—	16	11	—	3
In 7 Fatal Cases, - -	1	—	—	1	1	—	4	—	—	—
In 287 Cases, - - -	11	5	6	1	1	—	20	11	—	3
Percentage, - - -	3·8	1·7	2·09	0·3	0·3	—	6·9	3·8	—	1·04

TABLE VI.—ADMISSIONS (AS NOTIFIED) SINCE OPENING OF HOSPITAL.

Year.	Enteric Fever.	Scarlet Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Measles.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Cerebro-Spinal Fever.	Veneral Diseases.	Tinea.	Pneumonia.	Other Diseases.	Total.
1897	19	70	—	1	—	9	—	—	—	—	—	—	5	104
1898	211	349	12	2	2	13	—	—	—	—	—	—	22	611
1899	235	571	21	5	—	1	—	—	—	—	—	—	16	849
1900	145	638	21	6	2	6	—	—	—	—	—	—	14	832
1901	291	621	31	7	—	—	—	—	—	—	—	—	14	964
1902	160	431	16	12	—	6	—	—	—	—	—	—	86	711
1903	174	187	22	14	1	2	—	—	—	—	—	—	17	417
1904	112	155	53	13	1	3	—	—	—	—	—	—	329	666
1905	300	114	66	12	4	1	23	—	—	—	—	—	93	613
1906	214	283	72	8	2	6	76	—	8	—	—	—	16	685
1907	99	317	283	4	9	2	106	—	94	—	—	—	16	930
1908	131	508	206	14	6	9	53	—	61	—	—	—	23	1,011
1909	109	834	164	11	10	3	1	—	10	—	—	—	9	1,151
1910	148	696	267	16	12	1	27	—	5	—	—	—	15	1,187
1911	122	670	248	16	12	4	—	—	7	—	67	—	47	1,193
1912	106	888	193	11	9	5	5	13	2	—	73	—	47	1,352
1913	126	838	246	12	6	2	16	37	7	2	61	—	15	1,368
1914	108	958	361	20	11	4	11	44	7	5	27	—	13	1,569
1915	115	750	286	25	12	4	18	65	29	4	26	—	30	1,364
1916	95	1,030	251	12	16	1	16	45	17	2	—	—	14	1,499
1917	92	642	191	17	13	22	3	120	26	99	4	—	26	1,255
1918	105	313	241	13	7	29	7	93	14	236	13	—	204	1,275
1919	118	595	280	16	28	24	11	87	24	111	6	—	155	1,455
1920	59	1,128	313	33	39	10	—	107	29	124	5	55	48	1,950
1921	107	1,047	250	38	54	1	—	156	12	123	19	51	50	1,908
1922	49	1,093	234	39	56	12	—	133	12	87	11	124	60	1,910
1923	61	931	254	47	56	7	11	122	9	91	5	87	67	1,748
1924	35	878	295	36	45	38	24	138	8	80	10	133	110	1,830
1925	25	922	285	44	44	5	24	84	2	106	11	123	96	1,771
1926	14	791	406	53	65	33	13	75	4	80	8	197	135	1,874
1927	9	452	419	47	88	11	7	62	5	105	16	259	193	1,673
	3694	19700	5987	604	610	274	452	1381	392	1255	362	1029	1985	37725

TABLE VII.—DISCHARGES SINCE OPENING OF HOSPITAL.

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	Interic Fever.		Scarlet Fever.		Diphtheria.		Erysipelas.		Puerperal Fever.		Measles.		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Cerebro Spinal Fever.		Venereal Diseases.		Pneumonia.		Tinea.		Other Diseases.		TOTAL.	
	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.	Recd.	Died.
1891	11	1	43	2	—	—	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	2	1	58	5
1892	155	23	296	12	11	—	1	1	—	—	16	4	—	—	—	—	—	—	—	—	—	—	—	—	19	—	498	40
1893	201	21	536	20	15	4	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	1	810	50
1894	134	14	592	15	16	2	5	—	—	1	7	—	—	—	—	—	—	—	—	—	—	—	—	—	31	3	785	35
1895	200	21	610	22	20	7	8	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	908	51
1896	183	27	438	20	14	2	10	1	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—	735	50
1897	140	24	179	4	15	3	13	2	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—	362	33
1898	88	13	171	7	44	9	12	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	347	5	664	35
1899	211	22	109	5	42	8	12	1	3	1	4	4	21	1	—	—	—	—	—	—	—	—	—	—	108	3	540	45
1900	192	19	241	4	44	11	4	2	—	1	6	—	62	13	—	—	1	5	—	—	—	—	—	—	65	2	615	57
1901	91	9	313	9	192	16	9	1	3	—	2	1	77	19	—	—	28	58	—	—	—	—	—	—	91	6	806	119
1902	107	13	425	8	170	17	12	3	3	2	9	2	55	10	—	—	21	30	—	—	—	—	—	—	56	6	858	91
1903	99	3	781	24	129	16	10	1	8	2	3	—	1	—	—	—	2	4	—	—	—	—	—	—	56	5	1,089	55
1904	117	5	678	16	226	22	13	1	5	8	7	—	28	—	—	—	1	—	—	—	—	—	—	—	52	10	1,127	62
1905	78	11	617	18	232	18	18	—	5	5	3	—	1	1	10	—	1	2	—	—	—	—	61	—	115	7	1,141	62
1906	58	10	748	22	136	15	11	—	3	5	6	—	2	2	4	—	—	1	—	—	—	—	76	—	226	5	1,270	60
1907	87	5	724	15	150	13	10	1	2	4	1	1	11	3	41	5	1	—	—	—	—	—	61	—	228	8	1,316	55
1908	75	10	833	27	228	38	15	4	9	2	2	1	5	4	37	4	1	1	—	—	—	—	27	—	205	11	1,437	102
1909	82	10	641	20	214	29	18	6	9	1	5	3	15	5	47	4	11	9	—	—	—	—	36	—	148	10	1,226	97
1910	82	10	1,017	23	214	27	13	—	8	7	1	—	6	5	63	2	3	5	—	—	—	—	—	—	84	5	1,491	84
1911	77	14	563	19	185	25	14	1	7	3	20	1	2	1	109	2	6	13	98	—	—	—	4	—	111	11	1,196	90
1912	42	15	269	11	135	18	11	4	3	3	29	7	7	2	83	10	1	4	231	—	—	—	13	—	334	35	1,158	109
1913	82	11	450	12	180	14	13	—	15	10	27	4	7	4	94	3	6	10	104	1	—	—	6	—	301	38	1,285	107
1914	30	3	985	10	191	19	21	4	25	11	16	3	—	—	103	7	1	13	124	—	33	17	5	—	226	18	1,772	1
1915	76	14	997	19	167	22	31	7	41	13	2	—	—	—	136	9	1	4	122	3	40	8	19	—	221	10	1,853	109
1916	29	3	979	18	147	31	31	5	43	14	22	6	—	—	132	10	—	4	66	4	79	25	11	—	249	12	1,788	132
1917	42	3	879	19	186	18	38	4	34	17	5	1	10	1	103	16	1	1	77	3	45	18	9	—	203	10	1,632	111
1918	21	1	818	16	189	18	27	1	35	13	39	11	20	1	111	22	—	10	54	7	65	25	10	—	295	23	1,684	145
1919	11	3	800	16	179	11	39	4	31	14	6	1	20	4	90	7	—	2	93	1	70	19	11	—	297	30	1,650	112
1920	13	2	707	7	237	13	41	7	33	20	39	2	10	3	60	10	1	3	61	2	114	31	8	—	377	35	1,701	135
1921	1	1	465	3	280	7	41	4	56	24	6	1	6	1	47	13	—	6	76	3	135	41	16	—	470	38	1,599	142
Total	2,866	341	17,931	443	4,188	453	508	67	383	181	294	55	366	80	1,270	124	87	185	1,106	24	581	184	373	—	5,093	348	35,054	2,488
Per cent	10.6		2.4		9.7		11.6		32.0		15.7		17.9		8.9		68.0		2.1		24.0		—		6.4		6.6	

COUNTY OF LANARK

DISTRICT OF THE LOWER WARD

REPORTS

BY THE

MEDICAL OFFICER OF HEALTH

AND OF THE

SANITARY INSPECTOR

FOR THE YEAR

1927

Medical Officer of Health	-	-	County Offices, Hamilton
Assistant Medical Officer of Health			} County Buildings
Sanitary Inspector	-	-	
			149 Ingram Street, Glasgow

STAFF

Medical Officer of Health

J. HUME PATTERSON, F.R.F.P.S.(Glas.), D.P.H.

Assistant M.O.H. and Tuberculosis Officer

G. MACLEOD MILLAR, M.B., Ch.B., D.P.H.

Sanitary Inspector

JOHN B. PHILIP

Assistant Sanitary Inspector

THOMAS B. POLLOCK
(Certificated Meat Inspector)

Building, Housing, and Town Planning Inspector

M. UNDERWOOD, C.E.

Nurse Health Visitors—3

COUNTY OF LANARK.

DISTRICT OF THE LOWER WARD.

(Area, 21,166 Acres.)

Report by the Medical Officer of Health
For the Year 1927.

Vital Statistics.

The **Population** at the middle of the year 1927 has been estimated at **30,000**. The population of the various parishes is given in Table B.

The number of *inhabited* houses, according to the Valuation Roll, amounts to **6,153**, while there were 73 not inhabited.

Statistical Tables.—Table A shows the birth and death-rates per thousand of the population and the infantile deaths per thousand births for the decennial periods 1891-1900, 1901-10, and 1911-20, as well as those for each year since 1921.

Table B shows the population, births and deaths for the year in each parish and registration district, with the deaths classified according to cause.

Table C shows the deaths classified according to cause and age periods.

The **Births** registered in the District, after correction for transfers, amounted to **567**—males, 291; females, 276—giving a birth-rate of **18·9** per thousand of the population, compared with 19·06 in the year 1926.

The number of *illegitimate births* registered in the District, after correction for transfers, amounted to **31**—males, 14; females, 17—giving an illegitimate rate of **5·5** per hundred total births, compared with 3·5 in the year 1926.

The **Deaths** registered in the District, after correction for transfers, amounted to **308**, giving a death-rate of **10·3** per thousand of the population, compared with 11·3 in the previous year.

Deaths in relation to Age.—The deaths are here arranged in recognised age periods, and the percentage proportion of deaths at each age period is given :—

Infant Period,	-	Under 1 year,	46 deaths or 14·9 per cent.
Under School Age,	1-5 years,	18	„ 5·8 „
School Age,	- 5-15	9	„ 2·9 „
Adolescent,	- 15-25	11	„ 3·6 „
Early Mature Period,	25-45	33	„ 10·7 „
Late do.	45-65	67	„ 21·8 „
Post do.	65 years and upwards,	- 124	„ 40·3 „

Deaths due to Infectious Disease.—The deaths due to notifiable diseases numbered 49, made up as follows:—scarlet fever, 3; diphtheria, 2; erysipelas, 1; tuberculosis, 22 (pulmonary, 16; meningeal, 3; abdominal, 1; and other forms, 2); pneumonia (all forms), 20; encephalitis lethargica, 1.

The deaths due to non-notifiable diseases amounted to 10—whooping-cough, 8; diarrhoea, 2.

Respiratory Diseases.—The deaths during the year numbered 62, which includes those from pulmonary tuberculosis, and the following statistics show the deaths and death-rates per thousand of the population of the various forms for the past two years, and for the quinquennial periods, 1911-15, 1916-20, and 1921-25 :—

Year.	Pneumonia.		Bronchitis.		Influenza.		Pulmonary Tuberculosis.		Other Respiratory Diseases.	
	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.
Average.										
1911-15,	45	1·10	32	0·78	3	0·06	28	0·68	4	0·09
Average.										
1916-20,	41	1·38	23	0·76	5	0·16	22	0·73	6	0·18
Average.										
1921-25,	25	0·74	13	0·4	14	0·4	18	0·58	2	0·05
1926 -	21	0·67	13	0·4	20	0·6	21	0·67	5	0·15
1927 -	20	0·66	17	0·56	8	0·26	16	0·53	1	0·03

TABLE C.—LOWER WARD.—Year 1927.—Deaths classified according to cause and age periods.

CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																		
					WEEKS.				MONTHS.				YEARS.										Over 75.
					-1	-2	-3	-4	1.	3.	6.	9.	1.	5.	10.	15.	25.	35.	45.	55.	65.		
Typhoid Fever, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Smallpox, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Measles, ...	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Scarlet Fever, ...	3	—	—	3	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	—	—	—	
Whooping Cough, ...	8	—	—	8	—	—	—	—	2	4	—	1	1	—	—	—	—	—	—	—	—	—	
Diphtheria, ...	6	—	4	2	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	
Influenza, ...	9	—	1	8	—	—	—	—	1	—	—	—	—	—	1	2	—	—	1	1	1	1	
Cerebro-Spinal Fever, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas, ...	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
Dysentery (bacillary), ...	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis Lethargica, ...	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	
Pulmonary Tuberculosis, ...	19	2	5	16	—	—	—	—	—	—	—	—	—	—	—	5	3	5	1	2	—	—	
Meningeal " ...	3	1	1	3	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	
Abdominal " ...	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
Other " ...	1	2	1	2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	
Septicæmia and Pyæmia, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Rheumatic Fever, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malignant Diseases, ...	25	8	7	26	—	—	—	—	—	—	—	—	—	—	—	—	—	2	5	11	6	2	
Meningitis (Simple), ...	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	
Cerebral Hemorrhage, ...	24	2	5	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	7	8	
Other Nervous Diseases, ...	17	4	12	9	—	—	—	—	—	—	—	—	1	—	1	—	—	1	2	—	2	2	
Organic Heart Diseases, ...	41	5	9	37	—	—	—	—	—	—	—	—	—	—	1	—	2	4	4	8	11	7	
Other Circulatory Diseases, ...	6	—	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	
Bronchitis, ...	19	—	2	17	—	—	—	—	3	—	1	—	2	—	—	—	—	—	1	2	4	3	
Pneumonia (All Forms), ...	46	3	29	20	—	—	—	1	—	1	1	1	4	—	—	—	—	4	—	3	4	1	
Other Respiratory Diseases, ...	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
Diabetes, ...	1	2	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	
Pernicious Anæmia, ...	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diseases of Ductless Glands, ...	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
Appendicitis and Typhlitis, ...	1	3	—	4	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	
Liver Diseases (not malignant), ...	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	
Other Digestive Diseases, ...	11	3	3	11	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	1	3	3	
Nephritis, Bright's Disease, ...	11	2	4	9	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	5	2	1	
Dis. of Genito-Urinary System, ...	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
Dis. of Female Genital Organs, ...	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
Puerperal Sepsis, ...	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dis. and Acc. of Pregnancy, &c., ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Congenital Hydrocephalus, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Congenital Heart, ...	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Congenital Malformations, ...	1	2	—	3	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	
Infantile Convulsions, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diarrhœa (under 2 years), ...	2	—	—	2	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	
Premature Birth, ...	8	4	—	12	10	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Injury at Birth, ...	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Atrophy (D. & M.), ...	8	1	—	9	1	—	—	2	4	2	—	—	—	—	—	—	—	—	—	—	—	—	
Atelectasis, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Suffocation—Overlying, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Rickets, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Diseases of early Infancy, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Syphilis, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Violence, ...	22	7	11	18	1	—	—	—	—	—	—	—	4	—	—	—	3	3	2	2	1	2	
Suicide, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Defined Diseases, ...	46	8	9	45	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	13	30	
Ill-Defined Diseases, ...	5	2	1	6	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	3	1	
TOTAL	357	65	114	308	13	3	1	3	13	8	3	2	18	3	6	11	10	23	26	41	61	63	

Influenza.—In accordance with the method of classification adopted by the Register-General since 1st January, 1921, 8 deaths were ascribed to influenza. The diseases complicating these deaths were as follows:—bronchitis, 1; pneumonia, 1; epileptiform convulsion, 1; cardiac failure, 2; pulmonary congestion, 2. In one instance influenza was the sole cause of death.

Malignant Diseases.—Deaths falling under this heading numbered 26—males, 11; females, 15. The type of disease was—carcinoma, 25; and other forms, 1. The disease affected some portion of the gastrointestinal tract in 18 cases; the genito-urinary tract, 2 cases; others, 6.

TABLE A.—BIRTH-RATES AND DEATH-RATES PER 1000 OF THE POPULATION.
INFANTILE DEATHS PER 1000 BIRTHS.

Year. Average.	Births.	Birth-rate.	Net Deaths.	Death-rate.	Infants Deaths.	Under 1 year Death-rate.
1891 to 1900	1,200	32·9	577	15·9	150	125·2
Average. 1901 to 1910	1,576	33·4	683	14·4	174	110·8
Average. 1911 to 1920	869	24·1	428	12·2	88	98·2
1921	672	22·4	294	9·8	60	89·3
1922	643	21·2	345	11·4	48	74·6
1923	664	21·08	320	10·1	48	72·3
1924	625	19·17	331	10·1	48	76·8
1925	649	19·6	339	10·2	52	80·1
1926*	591	19·06	353	11·3	39	65·9
1927	567	18·9	308	10·3	46	81·1

*By the Glasgow Boundaries Act, 1912, an area of 1,706 acres, with a population of 28,490 was annexed by the City of Glasgow, which affected the statistics from 1st January, 1913, and again by the Glasgow Boundaries Act, 1926, a further annexation of 3,477 acres with a population of 4,350 took place which affected the statistics for the year 1926.

PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group I includes diseases which are compulsorily notifiable (a) under the Notification Act; (b) by adoption under the Notification Act; and (c) by order of

the Scottish Board of Health; and Group II, not compulsorily notifiable diseases. The diseases included in these groups are as follows:—

GROUP I.

(a)	(b)	(c)
Smallpox.	August, 1906.	1st August, 1912.
Diphtheria.	Cerebro-spinal Meningitis.	Pulmonary Tuberculosis.
Scarlet Fever.	24th October, 1912.	1st July, 1914.
Typhus Fever.	Acute Poliomyelitis.	All forms of Tuberculosis.
Enteric Fever.	Tetanus.	1st November, 1918.
Puerperal Fever.	Anthrax.	Ophthalmia Neonatorum.
Erysipelas.	Glanders.	1st August, 1919.
	Actinomycosis.	Malaria.
		Dysentery.
		Trench Fever.
		Acute Primary Pneumonia.
		Acute Influenzal Pneumonia
		26th December, 1924.
		Infective Jaundice.
		21st December, 1925.
		Infantile Paralysis.
		Polio-encephalitis.
		Encephalitis Lethargica.
		25th March, 1927.
		Chickenpox.

GROUP II.

Measles.	Mumps.	Ringworm.
German Measles.	Whooping Cough.	Scabies.

Table D shows the number of cases of notifiable infectious disease occurring in each parish during the year, and in the following paragraphs the prevalence and distribution of each disease is summarised.

All the outbreaks were carefully inquired into, and the usual recognised methods of investigation, isolation, and disinfection were carried out to control the spread of the disease.

TABLE D.—Number of Cases of Notifiable Infectious Disease recognised in each Parish during 1927.

Parish.	Diphtheria.	Scarlet Fever.	Puerperal Fever.	Erysipelas.	Ophthalmia Neonatorum.	Acute Primary Pneumonia.	Influenzal Pneumonia.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Encephalitis Lethargica.	Cerebro-spinal Meningitis.	Acute Anterior Poliomyelitis.	Dysentery.	Chickenpox.	Totals.
Glasgow (late Barony),	- 11	11	1	3	3	14	1	6	3	—	—	—	—	17	70
Cadder, -	- 60	32	2	10	2	57	17	19	17	2	1	—	7	26	252
Rutherglen,	- 15	22	—	2	4	28	2	6	4	1	—	1	—	18	103
Carmunnock,	- —	2	—	—	—	—	—	—	—	—	—	—	—	—	2
	86	67	3	15	9	99	20	31	24	3	1	1	7	61	427

The number of visits of inquiry made by the Sanitary Inspectors amounted to 299; intimations to parents and school teachers, 585; and 190 cases were removed to hospital. 151 apartments, 153 lots of bedding and clothing were disinfected, and 2 school apartments were disinfected.

In addition to the visits made to mothers and babies and to tuberculous patients, which constitute their principal duties, the Nurse Health Visitors also visit cases of certain infectious disease, both notifiable and non-notifiable, and give advice in methods of nursing and carrying out of treatment. During the year 857 such visits were made, and the following summary shows the more important diseases for which these visits were made:—

Measles, - - -	81	Pneumonia, - - -	227
Whooping Cough, - -	212	Ophthalmia Neonatorum, -	47
Impetigo, - - -	65	Acute Poliomyelitis, -	2
Chickenpox, - - -	49	Influenza, - - -	46
Ringworm, - - -	19	Debility, - - -	62
Mumps, - - -	4	Others, - - -	43

Smallpox.

No cases notified during the year.

Vaccination (Scotland) Act, 1907.—The returns received from the Registrars show that the number of statutory declarations of conscientious objection to vaccination amounted to 136, compared with 162 in the year 1926. Of this number 51 were in the registration district of Cadder East, 39 in Cadder West, 30 in Rutherglen, 15 in Shettleston, and 1 in Possilpark. The proportion of declarations for the whole District was 24 per cent. of the total births.

Diphtheria.

The following tabular statement shows the cases, deaths, and respective rates in quinquennial periods since 1892, and for the years 1926 and 1927:—

Year.	Numbers.		Deaths per 100 Cases.	Rates.	
	Cases.	Deaths.		Cases per 1000 Population.	Deaths per 10,000 Population.
Annual Average—					
1892-95,	25·2	8·2	32·6	0·75	2·47
1896-1900,	34·2	7·0	20·4	0·84	1·73
1901-05,	48·6	6·6	13·5	1·1	1·5
1906-10,	135·6	9·8	7·2	2·6	1·9
1911-15,	92·0	8·0	8·6	2·3	1·9
1916-20,	37·0	4·0	9·7	1·2	1·2
1921-25,	47·4	3·0	6·3	1·5	0·9
Year 1926,	74	6·0	8·1	2·3	1·9
„ 1927,	86	2·0	2·3	2·9	0·6

60 of the cases notified were removed to hospital, 26 being isolated and nursed at home.

Towards the end of October an outbreak of diphtheria occurred at Stoneyetts Institution.

On taking swabs of all patients and staff, a number of positive results was obtained. Up till the end of the year 47 persons had returned positive swabs, of whom 15 showed clinical symptoms.

11 of the cases were removed to hospital, the remainder being isolated at the institution. The cases giving positive throat swabs, but not showing clinical diphtheria, were isolated in two wards at the institution.

Schick testing was done by the medical staff of the institution, and the susceptibles were immunised.

Investigations were carried out, but the cause of the outbreak was not found.

The institution was closed to visitors during the outbreak.

At the end of the year nine persons were still isolated as returning positive throat swabs, of which number two had shown clinical evidence of diphtheria.

Of the 2 deaths, one occurred at home, while the other died in hospital nine days after admission.

The monthly distribution throughout the year was as follows:—

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
6	4	8	—	—	2	1	2	5	9	33	16

The age incidence of the cases and deaths was as follows:—

Ages.	-1	1-5	5-15	15-25	25-45	45-65
Cases, -	—	15	27	18	23	3
Deaths, -	—	2	—	—	—	—

The arrangements inaugurated in 1922 for a supply of antitoxin to be available to medical practitioners at the constabulary stations of the district have not been taken advantage of to any great extent with the exception of one district.

Scarlet Fever.

The following tabular statement shows the cases, deaths, and respective rates in quinquennial periods since 1892, and for the years 1926 and 1927 :—

Year.	Numbers.			Rates.	
	Cases.	Deaths.	Deaths per 100 cases.	Cases per 1000 Population.	Deaths per 10,000 Population.
Annual Average—					
1892-95, - -	189	9	4·6	5·6	2·6
1896-1900, - -	245	10	4·0	6·0	2·4
1901-05, - -	136	4	2·9	3·1	0·9
1906-10, - -	224	6	2·7	4·4	1·2
1911-15, - -	240	7	2·8	5·9	1·6
1916-20, - -	63	1	1·2	2·1	0·2
1921-25, - -	87	1	0·9	2·7	0·2
Year 1926, - -	79	2	2·5	2·5	0·6
„ 1927, - -	67	3	4·5	2·2	1·0

Of the 67 cases notified, 58 were removed to hospital. 3 of the cases notified were nurses in Lightburn Hospital, 3 were from St. Mary's Industrial School, while 1 was from Kenmure Industrial School.

The monthly distribution of the cases was as follows :—

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
3	4	7	4	2	4	1	5	12	6	5	14

The age incidence of the cases and deaths was as follows :—

Ages—		1-5	5-15	15-25	25-45
Cases, - -	5	44	13	5	
Deaths, - -	1	1	1	—	

Enteric Fever.

No cases were notified during the year 1927.

The following tabular statement shows the cases, deaths, and respective rates in quinquennial periods since 1892, and for the years 1926 and 1927 :—

Year.	Numbers.		Rates.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1000 Population.	Deaths per 10,000 Population.
Annual Average—					
1892-95,	48	7	15·5	1·4	2·2
1896-1900,	47	6	13·0	1·1	1·5
1901-05,	40	5	13·3	0·9	1·2
1906-10,	40	3	8·4	0·8	0·6
1911-15,	10	2	19·2	0·2	0·5
1916-20,	5	0·2	3·8	0·1	0·06
1921-25,	1·6	0·2	12·5	0·05	0·06
Year 1926,	4	1	25·0	0·1	0·3
„ 1927,	—	—	—	—	—

Cerebro-Spinal Meningitis.

One case was notified and removed to hospital, where the diagnosis was altered to cancer.

Erysipelas.

Cases, 15. Deaths, 1. Removed to hospital, 5. The death refers to the case of a female, age 64, who died at home.

Pneumonia.

Cases, 119. Deaths, 20.

The cases were thus described in the notifications:—broncho-pneumonia, 25; lobar-pneumonia, 17; influenzal-pneumonia, 20; primary pneumonia, 23; pneumonia (unqualified), 34.

The age and sex-incidence of the cases were as follows:—

	Ages—	-1	1-5	5-15	15-25	25-45	45-65	65 and upwards.
Males, -	.	6	24	15	12	14	2	2
Females,	-	7	16	10	1	4	2	3

37 cases occurred during the first quarter of the year; 25 in the second; 11 in the third; and 46 in the fourth. The greatest number notified in one month was 19 in December.

With the exception of patients whose home conditions were such as to ensure suitable treatment, the cases were visited by the Nurse Health Visitors, and nursing advice and assistance given. In all 227 visits were made to 114 cases. 36 cases were removed to hospital, compared with 46 in the previous year.

Encephalitis Lethargica.

Of the 3 cases notified, 2 were removed to hospital, 1 case died in hospital, while the diagnosis in the other case removed was altered to cerebro-spinal meningitis. This diagnosis, however, was not confirmed by bacteriological examination.

Acute Anterior Poliomyelitis.

One case aged $1\frac{1}{2}$ years was notified during the year.

Dysentery.

Seven cases of bacillary dysentery were notified from Gartloch Mental Hospital. The condition was not of a severe nature, and was discovered during the routine examination of stools, such an examination being carried out in all cases of diarrhoea in the institution. The cases were nursed in the institution. The source of infection has not been discovered at the time of writing. All the patients had been a considerable time in the institution.

Chickenpox.

Chickenpox was made compulsorily notifiable from 25th March. From that time, 61 cases were notified, 26 being from the Parish of Cadder, 18 from Rutherglen, and 17 from Glasgow Parish.

Non-notifiable Diseases.

The sources of information available to the Department regarding the prevalence of measles, whooping-cough, mumps, chickenpox, ring-worm, &c., are as follows:—(1) information sent by schoolmaster for the purpose of certification of scholars absent on account of infectious disease; (2) applications made by school authorities for closure of schools when the attendance is interfered with by epidemic prevalence; (3) information obtained by the Nurse Health Visitors; and (4) the returns of death received from the local Registrars. The deaths due to the various non-notifiable diseases are shown in Table B.

The following tabular statement shows the deaths registered from measles and whooping-cough, and the deaths per 10,000 of the population in quinquennial periods since 1892, and for the years 1926 and 1927.

Annual Average—	Deaths.	Measles.	Deaths.	Whooping Cough.
		Death rate per 10,000 Population.		Death-rate per 10,000 Population.
1892-95,	17	5·2	9	2·8
1896-1900,	25	6·2	21	5·3
1901-05,	21	4·8	28	6·3
1906-10,	23	4·5	27	5·4
1911-15,	12	3·0	14	3·4
1916-20,	6	2·0	8	2·6
1921-25,	5	1·3	6	1·7
Year 1926,	5	1·6	1	0·3
„ 1927,	—	—	8	2·6

Measles.—The number of cases brought to the notice of the Public Health Department from various sources was 75, and 2 cases were removed to hospital. 81 visits were made by the Nurse Health Visitors, who gave advice as to the nursing of the disease and preventing the spread of infection.

Whooping Cough.—The number of cases brought to the notice of the Public Health Department was 107, and 1 case was removed to hospital. 212 visits were made by the Nurse Health Visitors.

Other Diseases.—The following cases of non-notifiable diseases were also treated in Lightburn Hospital:—pediculosis, 1; meningitis, 1.

Schools.

No certificates for the closure of schools were given during the year. In some instances children were excluded from school, and all necessary steps taken to prevent the spread of infection.

Anthrax.

One outbreak of this disease in cattle was reported during the year from Cadder Parish. None of the persons in contact with the diseased animal was infected.

Venereal Diseases.

Bacteriological Examinations.—The following table gives a list of specimens sent to the County Bacteriological Laboratory:—

Specimen.	Sent by				Result.	
	Medical Practitioners.	Lightburn Hospital.	Coathill Clinic.	Motherwell Hospital.	+	-
Blood, -	15	6	2	2	3	22
Swab, -	16	—	—	—	4	12
Smear, -	3	—	—	—	—	3
Film, -	2	—	—	—	2	—
Urine, -	1	—	—	—	1	—
	37	6	2	2	10	37

Hospitals.

The Annual Report by the Physician-Superintendent of Lightburn Joint-Hospital forms an appendix to this report.

In addition to the cases treated in Lightburn Joint-Hospital, the following cases were treated in other institutions:—

Scarlet Fever,	-	-	-	1 case in Belvidere Hospital.
Diphtheria,	-	-	-	1 case in Motherwell Hospital.

Tuberculosis.

The provision of institutional treatment for tuberculosis was commenced in 1905, and notification was then arranged for on a voluntary basis. In the year 1907 pulmonary tuberculosis was made compulsorily notifiable in this District under the Notification Act, but was not made compulsorily notifiable throughout Scotland until 1st August, 1912. On 1st July, 1914, non-pulmonary tuberculosis was also made compulsorily notifiable throughout Scotland.

The following tabular statement shows the deaths from tuberculosis since the commencement of County administration; but, owing to the annexations which have taken place, it is not desirable to place too much reliance on these figures for the purpose of comparison, as the composition of the population, especially the proportion of urban to rural, has changed considerably :—

Annual	Pulmonary.			Non-Pulmonary.		
	Cases	Deaths	Death-rate	Cases	Deaths	Death-rate
Average—	Notified.	Registered.	per 10,000	Notified.	Registered.	per 10,000
1891-95,	—	42	12·8	—	29	7·1
1896-1900,	—	47	11·7	—	29	6·8
1901-05,	—	54	12·4	—	33	7·2
1906-10,	65	57	11·3	—	41	7·6
1911-15,	59	28	6·8	—	24	5·8
1916-20,	42	22	7·3	31	11	3·5
1921-25,	45·5	18·4	5·8	33·8	8	2·5
Year 1926,	*57	21	6·7	26	7	2·2
1927,	31	16	5·3	24	6	2·0

* 12 of these were notified from Gartloch Mental Hospital.

PULMONARY.

Mortality.—The deaths from pulmonary tuberculosis amounted to 16, giving a death-rate of 0·53 per thousand of the population. The deaths will be found, classified according to parish, in Table B, and the age incidence will be found in Table C.

Deaths in Relation to Notification.—Of the 16 deaths registered, 14 were notified cases. The 2 not notified deaths occurred outwith the Lower Ward district, and were transferred in.

Of the 14 notified cases, 1 was notified in 1919; 1 in 1923; 2 in 1924; 2 in 1925; 1 in 1926; and 7 in 1927. No less than 7 of the cases died within six months of notification, viz., 1 within a week, 1 within a month, 3 within 6 months, while 2 were notified after death.

In addition, one death of a notified case of pulmonary tuberculosis was ascribed to appendicitis, and is not included in the pulmonary figures; while 2 deaths, notified as and ascribed to pulmonary tuberculosis, were transferred out, as their usual residences were outwith the Lower Ward area.

Notification.—The number of cases notified amounted to 31, and were classified as follows:—definite (sputum not examined), 3; definite (sputum positive), 13; definite (sputum negative), 5; suspect for observation, 8; altered diagnosis, 1; and not visited, 1.

The age incidence of the cases notified was as follows:—

Ages,	-	1-5	5-15	15-25	25-45	45-65	Total.
Cases,	-	1	6	11	11	2	31

The occupations of the cases notified were:—housewives, 6; scholars, 6; domestic servants, 2; typist, 1; clerk, 1; labourer, 1; woodworker, 1; boltmaker, 1; tube worker, 1; charwoman, 1; sales-girl, 1; student, 1; boiler cleaner, 1; shirtmaker, 1; bus conductor, 1; no occupation, 2; and not known, 3.

Housing Conditions of the Cases Notified.—Nine of the cases lived in houses of one-apartment, 9 in two-apartment houses, 3 in three-apartment houses, 2 in four-apartment houses, 5 in houses of more than four apartments, and 3 in institutions.

Total Cases on Record.—At the beginning of the year there were 105 cases on the register, and during the year 31 new cases were notified, making a total of 136 cases dealt with. Of the total dealt with, 17 died (16 from pulmonary tuberculosis and 1 from other causes), 12 left the district, in 2 cases the names were removed from the register as the disease was arrested, in 1 instance the diagnosis was altered, 1 case was transferred to the non-pulmonary register, while 1 name was removed on proving to be non-tubercular. At the close of the year 102 cases remained on the register.

Revised Diagnosis.—As stated above, the diagnosis of tuberculosis was altered in 1 instance to influenzal debility.

Arrest or Cure of the Disease.—The cases whose names were removed from the register for this reason were notified in 1919 and 1926 respectively.

Proved Non-Tubercular.—The case whose name was removed from the register for this reason was notified in 1927.

NON-PULMONARY.

Mortality.—The deaths from non-pulmonary tuberculosis amounted to 6 (3 meningeal, 1 abdominal, and 2 other tuberculosis), giving a death-rate of 0·2 per thousand of the population. The deaths will be found classified according to parish in Table B. and the age incidence will be found in Table C.

Of the 6 deaths registered, 3 were not notified cases. All of the cases not notified died outwith the area, and were transferred in.

Notification.—The number of cases notified amounted to 24, and were classified as follows:—glandular, 8; osseous or arthritic, 7; abdominal, 4; meningeal, 3; lupus, 2.

The age incidence of the cases notified was as follows:—

Ages, -	-5	5-15	15-25	25-45	Total.
Glandular, -	—	6	1	1	8
Abdominal, -	1	2	1	—	4
Meningeal, -	2	1	—	—	3
Other Forms,	1	3	4	1	9

Total Cases on Record.—At the beginning of the year there were 76 cases on the register, and during the year 24 new cases were notified, making a total of 100 cases dealt with. Of the total cases dealt with, 4 died; 8 left the district; in 4 cases the names were removed from the register as the disease was cured, healed or arrested; while in 1 case the diagnosis was altered. At the close of the year 83 cases remained on the register.

Revised Diagnosis.—Excluding patients who died, the diagnosis was altered in 1 instance to debility.

Arrest or Cure of the Disease.—The 4 cases removed from the register were notified as follows:—1 each in 1917, 1918, 1920, and 1925.

DOMICILIARY TREATMENT.—Cases of tuberculosis suitable for treatment at home are supervised by the Tuberculosis Officer and Nurse Health Visitors. The visits made by the latter during the year numbered 1,649—975 to pulmonary and 874 to non-pulmonary cases. In addition, a considerable number of patients attended the Centres at Bishopbriggs and Chryston and the Public Health Offices in Glasgow, while the attendances at Cambuslang Dispensary were as follows:—

Cases.	Consultations.
288	168

One shelter was in use throughout the year.

20 cases received nourishment in the form of milk, eggs, and butcher meat. Malt, cod-liver oil emulsion, Virol, and chemical food were also supplied to suitable cases.

Sanatoria.

Pavilion VI at Lightburn Joint-Hospital is set aside for the treatment of tuberculous cases from the Lower Ward area. In addition to this, cases are also treated at the various Middle Ward sanatoria, and the following table shows the number of patients in the various institutions during the year:—

P. = Pulmonary.		N.P. = Non-Pulmonary.				
Institution.		Remaining end of 1926.	Admitted during 1927.	Discharged during 1927.	Died during 1927.	Remaining end of 1927.
Lightburn,	{ P.	11	27	28	2	8
	{ N.P.	6	17	17	—	6
Hairmyres,	P.	2	1	2	—	1
		19	45	47	2	15

The duration of residence in hospital of the cases dismissed in 1927 was as follows:—

	Months—1-3	3-6	6-9	9-12	12 and over.
Pulmonary,	- 17	8	4	1	2
Non-Pulmonary,	- 7	4	2	2	2

Refractories Industries (Silicosis) Scheme, 1919.

No examinations under the above scheme were made during the year.

MATERNITY AND CHILD WELFARE.

The number of births registered, corrected for transfers, was 567, the birth-rate for the year being 18·9 per thousand of the population. Of the 567, 31 were illegitimate.

Notifications.—Of the 567 births registered, 519 were notified, and, in addition, 24 still-births were reported.

Table E shows the births registered, births notified, visits made by the Nurse Health Visitors, the attendant at confinement as ascertained at the first visit, infant deaths registered, and the infantile death-rate, the information being tabulated according to parishes.

TABLE E.—Lower Ward District.

	Births.		Notified. Registered. Alive. Stillborn.	Number of Visits.		Attendant at Confinement.		Infant Deaths.			
	Registered.	Alive.		First.	Subsequent.	Doctor.	Midwife.	Registered.	Rate per 1000 Births.		
Glasgow (late Barony),	...	90	73	2	78	799	877	37	41	8	14.1
Cadder,	362	343	17	352	2,525	2,877	202	150	32	56.4
Rutherglen,	...	107	99	4	92	1,074	1,166	32	60	6	10.6
Carmunnock,	...	8	4	1	7	39	46	7	—	—	—
...	567	519	24	529	4,437	4,966	278	251	46	81.1	

Infantile Mortality.—The deaths of infants under one year numbered 46, giving an infant mortality rate of 81.1 per thousand births, as compared with 65.9 in the previous year. Of the 46 deaths, 25, or 54.3 per cent., were due to developmental causes, which include prematurity, atrophy, &c. Of these 25 deaths, 17, or 68 per cent., occurred during the first four weeks of life.

Table F shows the infant deaths arranged according to the classification requested by the Board of Health.

Table F.

		AGE PERIODS.					Total.
		Weeks.		Months.			
		- 1	1-4	1-3	3-6	6-12	
Chickenpox,	- - -	—	—	—	—	—	—
Measles,	- - -	—	—	—	—	—	—
Scarlet Fever,	- - -	—	—	—	—	—	—
Whooping-Cough,	- - -	—	—	2	4	1	7
Diphtheria and Croup,	- - -	—	—	—	—	—	—
Erysipelas,	- - -	—	—	—	—	—	—
Tuberculous Disease,	- - -	—	—	—	—	1	1
Meningitis (not tuberculous),	- - -	—	—	—	—	—	—
Hydrocephalus,	- - -	—	—	—	—	—	—
Convulsions,	- - -	—	—	—	—	—	—
Pneumonia (all forms),	- - -	—	1	—	1	2	4
Influenza,	- - -	—	—	1	—	—	1
Bronchitis,	- - -	—	—	3	—	1	4
Diarrhœa and Enteritis,	- - -	—	—	1	1	—	2
Other Digestive Diseases,	- - -	—	—	—	—	—	—
Congenital Malformation,	- - -	1	—	2	—	—	3
Congenital Heart Disease,	- - -	—	—	—	—	—	—
Premature Birth,	- - -	10	2	—	—	—	12
Atrophy, Debility, and Marasmus,	1 - - -	1	2	4	2	—	9
Atelectasis,	- - -	—	—	—	—	—	—
Injury at Birth,	- - -	—	1	—	—	—	1
Suffocation (overlying),	- - -	—	—	—	—	—	—
Syphilis,	- - -	—	—	—	—	—	—
All other causes,	- - -	1	1	—	—	—	2
		13	7	13	8	5	46

Puerperal Fever.—3 cases were notified, and all were removed to hospital. In one instance a midwife was in attendance at the birth. All the cases recovered.

Still-Births.—Special visits of inquiry were made, and the records of 20 cases showed that the following conditions were noted as the probable cause:—

(a) *Affecting the Mother.*—Ante-partum hæmorrhage, 3; contracted pelvis, 2; poor physique, 1; pneumonia, 1; delayed labour, 1; albuminuria and difficult labour, 1; accident, 1; unknown, 5.

(b) *Affecting the Child.*—Prematurity, 2; prolapse cord, 1; non-closure of foramen ovale, 1; anencephalic, 1.

In 9 instances the fœtus was stated to be normal in appearance; in 4 macerated; and in 7, the condition was unknown.

In 14 instances the confinement was normal; in 4, forceps were used; 1 was a premature delivery; while 1 was an induction of labour.

All the mothers were not otherwise employed than at their household duties.

In 6 cases the still-birth was the first pregnancy; in 5, the second; in 1, the third; in 2, the fourth; in 3, the fifth; in 1, the sixth; and in 2, the seventh.

In 5 instances a doctor alone was present at the confinement; in 7, a midwife alone; and in 8, the confinement took place in an institution. In 6 instances where a midwife was in attendance a doctor was called in.

Ophthalmia Neonatorum.—9 cases were notified; 3 being notified by doctors, 4 by midwives, and 2 by health visitors. In 3 instances a doctor attended at the confinement, and in 6, a midwife. One case was removed to hospital. In all the cases bacteriological examination showed that bacteria other than gonococci were the cause of the ophthalmia.

Necessitous Cases.—An allowance of milk was granted to nursing and expectant mothers, and to children who were ill-nourished and in necessitous circumstances.

Forms showing the home and financial circumstances of the applicants are in use. These have proved of great assistance in checking the statements.

Throughout the year 116 families were granted assistance, at an estimated cost of £99 13s. 5d., compared with 303, at an expenditure of £403 16s. 9d last year.

Child Welfare Centres.—It is again a pleasure to acknowledge the voluntary assistance of the lady members of the two Child Welfare Associations, and to know that their work is still being carried on.

	Year.	Mothers.	Children.	Consul- tations.	Lectures.	Demon- strations.
Chryston,	1919,	1,123	609	210	10	36
	1920,	1,577	1,267	443	10	38
	1921,	1,413	958	303	7	29
	1922,	1,851	1,358	487	10	33
	1923,	1,747	1,596	430	11	37
	1924,	1,516	1,346	353	10	38
	1925,	1,676	1,369	250	6	41
	1926,	2,305	1,616	320	6	20
	1927,	1,865	1,407	277	13	32
Bishopbriggs,	1919,	1,260	926	282	10	38
	1920,	1,748	1,321	438	9	39
	1921,	1,688	1,041	379	7	30
	1922,	2,225	1,427	526	10	31
	1923,	2,128	1,745	487	10	37
	1924,	2,374	1,892	601	10	38
	1925,	2,145	1,593	571	8	38
	1926,	3,141	2,145	544	5	22
	1927,	1,896	1,332	409	8	35
Cambuslang,	1924,	403	339	233	—	—
	1925,	135	199	190	—	—
	1926,	817	223	304	—	—
	1927,	430	370	390	—	—

Consultations at Centres.—The conditions found are summarised in the following table:—

Mothers—

Ante-natal,	-	-	29	Respiratory,	-	-	4
Post natal,	-	-	21	Anæmia,	-	-	4
Gynæcological,	-	-	8	Injury,	-	-	2
Debility,	-	-	5	Mastitis,	-	-	2
Skin Conditions,	-	-	5	Eyes,	-	-	2
Others,	-	-	7	Ear, Nose and Throat,	-	-	2

Children—

Nutritional and Gastro-				Debility,	-	-	6
intestinal,	-	-	102	Injury,	-	-	5
Skin,	-	-	43	Phimosi,	-	-	3
Respiratory,	-	-	41	Tongue tied,	-	-	2
Ear, Nose and Throat,	-	-	25	Hare-lip and cleft palate,	-	-	2
Eyes,	-	-	22	Stomatitis,	-	-	3
Rickets,	-	-	11	Anæmia,	-	-	2
Hernia.	-	-	11	Others,	-	-	9

Visitations.—The number of visits made by the three Nurse Health Visitors was 5,771, of which 527 were first visits, 4,437 revisits, 43 special visits, 36 infantile mortality visits, 256 ante-natal visits, and 472 revisits to children from the age of 18 months to 5 years. These figures, of course, do not include the visits made by nurses to cases of infectious and contagious diseases, which are referred to on page 459.

Hospital Admissions.—The County Maternity Hospital at Bellshill and Convalescent Home at Calderbank continued to grant facilities for the treatment of suitable cases.

35 mothers were treated in Bellshill, and the conditions requiring removal were thus described:—difficult confinement, 4; unsuitable home, 15; ante-natal treatment, 4; ante-partum hæmorrhage, 3; operative treatment, 2; albuminuria, 1; hyperemesis, 1; placenta prævia, 1; abortion, 1; induction of labour, 1. Two mothers were also admitted for confinement who suffered from pulmonary tuberculosis.

7 mothers, 3 babies, and 7 children were treated in Calderbank Home. The mothers were admitted for the following reasons:—Ante-natal debility, 3; post-natal debility, 3; anæmia, 1. They were all in necessitous circumstances, and could not provide themselves with the rest they required. The results were excellent.

Of the 10 children treated in Calderbank Home, 4 were suffering from rickets; 1 from debility; 1 from eczema; 3 were admitted with mother, while 1 was admitted owing to the mother being in hospital.

One mother was admitted to Blantyre Hospital on account of post-natal debility, her baby being admitted with her.

It should be noted that where patients were transferred from one institution to another (*e.g.*, from Bellshill Hospital to Calderbank Home), it is taken as one admission.

One mother was admitted to the ante-natal ward in the Royal Maternity Hospital, Glasgow, on account of threatened abortion.

In addition, 7 mothers from the District were admitted while in labour, to the Royal Maternity Hospital, Glasgow, all going in of their own accord.

GENERAL SANITATION.

In the report of the District Sanitary Inspector, which is incorporated, will be found an account of the work done, under the headings, "Housing," "Water Supply," "Drainage and Sewage Disposal," "Scavenging," "Nuisances," "Seasonal Workers," "Workshops," "Sanitary Condition of Dairies, Cowsheds, and Milkshops," &c.

Milk (Special Designations) Order (Scotland), 1923.

One licence was granted for the sale of "Grade A (Tuberculin Tested) Milk" during the year.

Veterinary Inspection of Dairy Herds.

The observation and investigation of bovine tuberculosis, especially in dairy stock, has, since the year 1904, been the subject of veterinary inspection, and the detailed result of the work in the Lower Ward is here given.

Under the Milk and Dairies (Scotland) Act, 1914, it is an offence to sell milk from a cow suffering from *any disease* liable to infect or contaminate the milk. Samples of milk are therefore taken from any animal which is suffering from any suspicious condition of the udder. If, on examination, in the bacteriological laboratory such samples are found to contain streptococcus mastitis or other infective germs, a letter is sent to the owner of the animal directing his attention to the fact that it is an offence to sell or expose for sale the milk from such a cow for human consumption. During the year 1927, 31 such letters have been sent. If the samples are found to contain tubercle bacilli the animals are dealt with under the Tuberculosis Order.

During the year 21 cows were slaughtered under the Tuberculosis Order.

VETERINARY INSPECTION OF DAIRY HERDS.—YEAR 1927.

Parish.	Herds Registered	Herds Inspected.	Cows Inspected.	Cows with Abnormal Condition of Udder.						Samples of Milk.			
				Tubercle.	Atrophy.	Mastitis.	Induration N.T.	Eruption on Teats.	Totals.	Number taken.	Number found to contain tubercle	Number found to contain infectious organisms.	Number negative.
Cadder.	62	72	1,539	7	50	11	14	1	83	69	7	21	41
Barony,	10	14	266	—	7	—	4	—	11	9	—	2	7
Carmun- nock,	19	17	527	1	31	6	11	1	51	16	1	10	5
Ruther- glen,	4	7	99	2	2	—	2	—	6	9	2	1	6
	95	110	2,431	10	90	17	31*	2	151	103	10	34†	59

* Includes cases of suspected tubercle which proved negative.

† These samples were taken from 26 cows.

COUNTY OF LANARK
DISTRICT OF THE LOWER WARD.

Midwives (Scotland) Act, 1915.

Annual Report by the Medical
Officer of Health, 1927

STAFF.

Administrative Officer.

J. HUME PATTERSON, F.R.F.P.S.(Glas.), D.P.H.

Executive Officer and Inspector of Midwives.

G. MACLEOD MILLAR, M.B., Ch.B., D.P.H.

Nurse Health Visitors and Assistant Inspectors of Midwives.

(All hold C.M.B. Certificate.)

MARGARET L. WINCHESTER.

CATHERINE CAMPBELL.

JEAN B. MAY.

REPORT.

Practising Midwives.—13 midwives resident within the District notified their intention to practise during the year. 1 resided in the Parish of Glasgow, 11 in Cadder, and 1 in Rutherglen. 18 midwives resident outwith the District attended cases during the year, all of whom have recognised qualifications.

Certification.—2 of the midwives hold the Certificate of the Central Midwives Board for Scotland by examination; 2 have the Certificate of the Royal Maternity Hospital, Glasgow; and the remaining 9 are *bona fide* midwives.

Length of Time in Practice.—4 have been in practice for over 30 years, while 5 have acted for over 20 years.

Attendance at Confinements.—567 births were registered, and of this number, 543, or 95 per cent., were notified, and 44 per cent. were attended by certified midwives. The following table gives, according to parish, the number of births registered and notified, and of those notified, the person in attendance at confinement:—

Parish.	Number of Births.		Attendance at Confinement.	
	Registered.	Notified.	Doctor.	Midwife.
Glasgow, - -	90	75	34	41
Cadder, - -	362	360	210	150
Carmunnock, -	8	5	5	—
Rutherglen, -	107	103	43	60
	567	543	292	251

Inspection of Midwives.—The total number of inspections made by the Assistant Inspectors of Midwives was 58. They found that the *personal conditions* were satisfactory in 9 instances, and only fair in 4. The *home conditions* were described as satisfactory in 9 instances, and only fair in 4.

5 midwives in the District are unable to read or write, and their *records* are kept by members of the family.

Extent of Practice.—The registers kept by the midwives showed that one attended over 30 confinements; 5 from 10 to 20; 4 from 1 to 10, while 3 only attended confinements with a doctor.

Medical Assistance.—In 45 instances a doctor was called to the assistance of the midwife in accordance with the rules of the Central Midwives Board. The conditions requiring medical aid were as follows:—On account of mother—Prolonged labour, 17; ruptured perineum, 5; breech presentation, 5; occipito posterior, 3; difficult labour, 2; rigidity of perineum, 2; rise of temperature, 2; ante-partum hæmorrhage, 2; post-partum hæmorrhage, 1; twin pregnancy, 1; weakness, 1; contracted pelvis, 1. On account of baby—Discharge from eyes, 1; convulsions, 1; prematurity, 1.

Payment of Doctors' Claims.—25 claims amounting to £37 ls. 6d. were received, and of this sum £1 18s. 6d. was recovered from the husbands of the patients.

Puerperal Septicæmia (including all notifications of Puerperal Fever).—3 cases were notified, all being removed to hospital. In 1 instance a midwife was in attendance at the birth.

Still-Births.—During the year 24 still-births were reported, 8 of which were attended by doctors, 8 by certified midwives, and 8 occurred in institutions. 6 forms notifying still-births were received from midwives during the year.

Ophthalmia Neonatorum.—9 cases were notified, 3 by doctors, 4 by midwives, and 2 by health visitors.

Liability to be a Source of Infection.—One form was received from a midwife, who had been in contact with a case of Puerperal Fever.

Artificial Feeding.—2 forms notifying advice of artificial feeding by midwives were received during the year.

Report by the Sanitary Inspector

For the Year, 1927.

AREA, 21,166 ACRES. ESTIMATED POPULATION, 30,000.

The District Committee's Housing Schemes, the first instalment of which, comprising 530 houses—186 of three apartments and 344 of two apartments—is nearing completion, and the houses will be almost wholly occupied by May of next year.

As was mentioned in my previous report, sanction of the Board of Health was obtained to build 60 per cent. of two-apartment houses and 40 per cent. of three apartments.

The question of proceeding with the second instalment was considered by the Committee, who were of opinion that two-apartment houses, with the usual conveniences, bathroom and scullery, were what was urgently required to meet the needs of the people in this area.

It has been our experience that dispossessed tenants are diffident in taking the three-apartment houses owing to their inability to pay the rent of £22 per annum, exclusive of rates. The tenants, in the houses they formerly occupied, were probably paying about £10 per annum, inclusive of rates, and to expect them to pay almost treble this amount seems to be beyond them, even the two apartment at £16 10s. per annum being found in many cases a financial burden.

The question of proceeding with the second instalment of the Housing Scheme was still under consideration at the end of the year. The Committee, however, having in view the serious liabilities undertaken in connection with the houses already in hand and the difficulty or impossibility of knowing at this stage how far those occupiers of insanitary small houses for whom the new houses are principally intended can be got to take advantage of them, agreed that the best course was to delay doing anything further with regard to the remaining portion of the scheme until it was seen how far the portion already in hand would be successful in rehousing the class whom the Committee primarily desired to benefit.

A further additional aid to housing was carried out by the Second National Housing Trust, Limited, who submitted plans for 542 houses of the Weir type at Springboig, Shettleston. There were three types of houses built, the "Douglas" (4 apartments), "Eastwood" (three apartments, bungalows), and "Blane field" (three apartments), the rents being £34, £28, and £27 10s. respectively. A start was made with the erection of the houses in July, and it is the intention of the Trust to have the whole scheme completed by March, 1928. Good progress had been made by the end of the year, and I have no doubt that the houses will be completed in the time stated by the Contractor.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

With a view to obtaining particulars of the condition of properties 278 visits were made, and from the information received 243 representations for Closing Orders were submitted to the Public Health Committee. The Committee, after due consideration, issued 202 Closing Orders, and 6 houses were closed voluntarily. Eleven houses, for which Closing Orders were granted, were afterwards put into a fit state for human habitation. These were single apartments, built of whinstone, with asphalt floors below the level of the adjoining ground. There was no damp-proof course in the walls, and these were plastered on the solid. Domestic water supply was obtained from a Kennedy well at the extreme end of the Row. The sanitary conveniences consisted of two privies at the rear of the property. This Department had been dealing with these premises since 1913. The proprietor in reconstructing inserted a damp-proof course of Caithness slab throughout the outside walls, laid wooden floors with the necessary ventilation, and fixed a sink with gravitation water in each house; strapped and lathed the walls; built four water-closets and washhouse with the necessary drainage. The cost of the reconstruction was about £900.

A scheme has been formulated in terms of the Housing (Rural Workers) Act, 1926. There is no considerable scope for the Act as regards rural workers' dwellings in this area, although there are a few isolated properties for which schemes might be considered by the owners. If the scheme is confined wholly to agricultural workers I am afraid very little will be done, but if extended to include houses occupied

by miners (coal and clay), also general labourers, whose economic position is the same as agricultural workers, then the position would be entirely different. The majority of the houses occupied by these people are let at very low rents, averaging £5 or thereby per annum, and I am convinced that if the Act applied thereto it would be of considerable assistance in aiding the solution of the housing problem in some of the villages in this district. Many of the houses on our list of houses considered, in their present condition, to be unfit for human habitation, could be rendered habitable, always keeping in view their rural situation. It is extremely unlikely that any money will be expended by the owners of such properties, even if the Local Authority pronounce Closing Orders; but if assistance were given under this Act, by means of grant or loan, it is probable that the owners would be more willing to consider their obligations.

The following table gives the position of the District Committee's Housing Schemes at the end of the year :—

	Total Number of Houses				Number of Houses Completed				
	2 Apartments		3 Apartments		2 Apartments		3 Apartments		
	Flats	Tenements	Flats	Tenements	Flats	Tenements	Flats	Tenements	
Auchinloch,	-	—	12	8	—	—	12	8	—
Auchinairn									
(Springfield Lodge),	20	18	28	18	—	4	4	6	
Carmunnock,	-	12	—	8	—	12	—	8	—
Chryston,	-	24	—	28	—	24	—	12	—
Eastfield (3 sites),	-	36	36	8	30	—	—	—	—
Garnkirk (2 sites),	-	56	—	36	—	36	—	24	—
Gartcosh,	-	20	—	8	—	20	—	8	—
Millerston,	-	32	—	20	—	—	—	20	—
Moodiesburn,	-	8	—	4	—	8	—	4	—
Stepphill,	-	—	30	—	—	30	—	—	—
	208	96	148	48	100	46	88	6	

Tabulated Statements A. B. C. showing Proceedings taken as regards the Inspection and Closure of Dwelling Houses.

A.—HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

1. Number of dwelling houses inspected, ...	278
2. Number of dwelling houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation, ...	243

3. Number of representations made to the Local Authority with a view to the making of Closing Orders,	243
4. Number of dwelling houses in respect of which Closing Orders were made,	202 (6 ^{closed} voluntarily)
5. Number of dwelling houses the defects of which were remedied without either the making of Closing Orders or the service of Notices under Section 3 (1) of the Housing (Scotland) Act, 1925,	—
6. Number of dwelling houses which after the making of Closing Orders were put in a fit state for human habitation,	11

B. HOUSING (SCOTLAND) ACT, 1925.

1. Number of dwelling houses in respect of which Notices were served under Section 3 (1),	28
2. Number of dwelling houses rendered fit for human habitation under Section 3 (1),	20
3. Number of dwelling houses in respect of which Closing Orders were deemed to have become operative under Section 3 (1),	—
4. Number of dwelling houses rendered fit for human habitation by the Local Authority under Section 3 (2),	—
5. Number of cases where Intimations were given under Section 20 (1) as to insufficient water-closet accommodation,	8
(a) Cases where requirements were complied with by owners,	8
(b) Cases where works were carried out by Local Authority after failure of owners to do so,	—
(c) Cases still pending,	1
6. Number of houses (a) one apartment, and (b) two apartments, for the erection of which the consent of the Local Authority has been given in terms of Section 111,	(a) — (b) 60

* Built under 1924 Act.

C.—HOUSING AND TOWN PLANNING, &c. (SCOTLAND), ACT, 1919.

1. Number of cases where Notices were served under Section 40 (1) to provide dwelling houses with water supply,	1
(a) Cases where requirements were complied with by owners,	1
(b) Cases where work was carried out by Local Authority,	—
(c) Cases still pending,	—

The following is a list of Houses in respect of which Closing Orders were made.

	Parish.		1 Apt.	2 Apts.	3 Apts.	4 Apts.
BISHOPBRIGGS.						
111 Auchinairn Road,	Cadder,	...	—	4	—	—
130-136 do.	do.	...	4	4	—	—
146-152 do.	do.	...	4	—	—	—
188-194 do.	do.	...	4	—	—	—
70-74 Springfield Road,	do.	...	1	3	1	—
Crowhill Cottages,	do.	...	3	2	—	—
Brown's Land,	do.	...	24	6	—	—
STEEPS.						
Cardowan Row,	Barony,	...	—	7	—	—
Garteraig Row,	do.	...	3	7	1	—
CHRYSTON.						
Ogilvie's Property,	Cadder,	...	2	2	2	—
Dougall's Property,	do.	...	2	—	2	—
Knox's Property,	do.	...	4	—	—	—
Faill's Land,	do.	...	—	3	—	—
Moss Cottage,	do.	...	—	—	1	—
GARNKIRK.						
Store Row,	do.	...	—	11	—	—
Double Row (north-west),	do.	...	—	1	2	—
Double Row (south-west),	do.	...	1	6	1	—
Double Row (east),	do.	...	—	8	—	—
Low Row,	do.	...	—	15	—	—
High Row,	do.	...	5	8	—	—
MOLLINSBURN.						
Christie's Property,	do.	...	1	3	—	1
GARTCOSH.						
Hut, Johnston Loch,	do.	...	1	—	—	—
Garnqueenhill Cottages,	do.	...	4	—	—	—
Brown's Land,	do.	...	5	2	—	—
CARMUNNOCK.						
Westhills Cottages,	Carmunnock,	...	—	3	—	—
Wellside Cottage,	do.	...	1	—	—	—

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTION) ACTS, 1920 TO 1925.

No applications were received in respect of the above Act during the year.

BUILDING BY-LAWS.

The number of plans lodged was 48, and of these 46 were approved, as compared with 87 in the previous year.

The number and size of the houses as indicated by the plans lodged were as follows:—60 houses of two apartments, 351 houses of three apartments, 329 houses of four apartments, 22 houses of five apartments, 3 houses of six apartments, 3 houses of seven apartments, and 1 house of eight apartments.

In administering the Building By-laws the Building Inspector reports that 25 visits of inquiry were made regarding plans lodged, and 1,536 inspections were made during the progress of construction and alteration of houses and other buildings, and that in connection with sites, formation of roads, construction of sewers, fences, the progress of construction and other matters relative to the District Committee's Housing Schemes 968 inspections were made.

456 applications of the smoke-test were made to the drains and plumber work of 478 properties.

562 houses, 1 workshop, and 1 addition to workshop were passed for occupancy.

WATER SUPPLY.

The water supply to the areas for which the Corporation of Glasgow is directly responsible has been fairly well maintained, and there have been no complaints.

Cadder Special District.—The supply over the whole Special District during the year has been satisfactory, with the exception that some complaints were received as to want of pressure, due to silting up of the smaller mains. Arrangements have been made where this has occurred to have the mains thoroughly scraped or replaced by larger pipes.

The new high-level ferro-concrete tank at Garthamlock, for which extension of time was granted, has been completed, and is now in operation, giving an increased supply and pressure to the Chryston

area; also the new main from Muirhead via Druncavel Road and Lochend Road to Gartcosh is now in use, with the result that a much better supply is obtained in the Gartcosh district.

The following works were carried out in the North and South Cadder districts during the year :—

Southern Section.

The iron piping in this section was increased by laying the following pipes :—

1,760 lineal yards of 12-inch main from Lethamhill to the high-level tanks.

213 lineal yards of 3-inch main at the District Committee's Housing Scheme, Millerston.

58 lineal yards of 3-inch main for Beveridge & Stevenson's houses at Millerston.

120 lineal yards of 2-inch main by Beveridge & Stevenson as a private pipe for houses at Millerston.

115 lineal yards of 2-inch pipe in Mount Harriet Drive, Steps.

This brings the iron piping of the Southern Section up to 51 miles, 572 yards.

There were 41 connections made to the water mains during the year for domestic purposes and 3 connections for other than domestic purposes.

Northern Section.

The iron piping was increased by laying the following pipes, viz. :—

120 lineal yards at Auchinairn Housing Scheme.

250 lineal yards in new road between Wester Cleddens and Crosshill Road.

130 lineal yards in Crosshill Road.

90 lineal yards in Brackenbrae Avenue, and

40 lineal yards in Kenmure Avenue, a total of 640 lineal yards.

All these pipes were of 3-inch diameter. This brings the iron piping in the Northern Section up to 36 miles 1,383 lineal yards.

There were 33 connections made to the mains during the year, 31 for building and domestic purposes and 2 for meter supplies.

The supply to the residential district of South Lenzie is, by arrangement, provided by the Commissioners of the Burgh of Kirkintilloch, and has been satisfactorily maintained during the year.

A portion of the Burnside area is supplied by the Middle Ward District. A complaint was received regarding the amount of deposit in the water, and a sample for analysis was submitted to the County Chemist, whose report stated—"This is a peaty water having a good deal of colour, but is free from pollution. The sample is not quite clear, and is therefore of slightly objectionable physical appearance."

DRAINAGE.

SPECIAL DRAINAGE DISTRICTS.

Barony.—Considerable extensions to the sewers in this area have been made during the year by the Second National Housing Trust, Limited, to drain the houses built by them in Springboig.

New sewers were laid in the following streets—Springboig Road, Greenfield Avenue, Colinton Avenue, Warriston Place, Glen Avenue, Hermiston Avenue, Threestonehill Avenue, Hermiston Place, Greenfield Road, Hermiston Road, and Hollowglen Road.

In addition, an extension of the sewer in Hallhill Road was laid by the District Committee for the drainage of the new Police Station, and the same sewer was further extended to meet the requirements of the Second National Housing Trust, Limited.

A new 6-inch sewer laid in connection with the new Edinburgh and Glasgow Road for the drainage of Bertrohill Terrace was taken over free of charge as a public sewer.

An extension of the 9-inch sewer on Cumbernauld Road was made eastwards for a distance of 40 yards by Mr Robert Watson, Stepps, the sewer to be taken over on the usual terms when there is sufficient drainage assessment to pay the interest and sinking fund charges.

Westthorn Sewage Purification Works.—These works have now been in operation for a year, and the results have not been what

was expected. The total dry weather flow is approximately 1,600,000 gallons, but with the present aeration provided it is impossible to treat this quantity of sewage. The quantity presently being treated is normally 1,230,000, and when the sewage is at its full strength, about two to three o'clock in the afternoon, the finished effluent becomes cloudy. There is also the question of settlement tanks, as it has become quite evident that these are not sufficient to deal with the quantity of sewage passing through the aeration tanks.

During the year new sludge pits were laid down, giving three times the original area. One of the most difficult problems in the Activated Sludge System of Sewage Purification is the disposal of the surplus sludge owing to the amount of water it contains.

Five connections were made to the sewers during the year.

Rutherglen (Landward).—The intercepting sewer and the sewer in Baronald Street were surcharged during the year in the months of January, July, and August. During July and August the flooding was exceptional, and in Baronald Street the sewer manhole covers in some cases were forced up. Undoubtedly the storm overflow, laid down in 1926, has considerably improved any chance there is of flooding taking place, but it has not in itself proved a cure. So much is being discharged to the sewer now that great difficulty is experienced in normal weather even to make proper connections to the sewer, so much so that on one occasion during the year a connection had to be made on a Sunday when the sewer was at its lowest.

The joint intercepting sewer was cleaned out this year, and it was with great difficulty the work was done efficiently. In my opinion, it would be advisable to have the manholes cleaned out more often, say, three times a year, and so keep the accumulation of silt and grit down to a minimum. Meantime the difficulty arises in cleansing between the manways. Road grit and coaly material appear to be the cause of the whole of the trouble. If Downiebrae Road was relaid in tar macadam a considerable improvement would be observed in the sewer, which would undoubtedly increase its carrying capacity and so reduce the risk of flooding.

The following is a report from the County Chemist regarding three samples of silt taken from the sewer in Downiebrae Road at different points, viz. :—

“*No. 1 Sample.*—Rutherglen Colliery Manhole—Washed sludge consists of road grit of a medium size with many coaly and ashy particles.

No. 2 Sample.—Paper Works Manhole—Consists of very large particles, mostly stone with few pieces of ash and coal.

No. 3 Sample.—Dalmarnock Bridge Manhole—Road grit of fine size, with a large proportion of very fine coaly particles and few pieces of ash.

There was nothing distinctive about the lighter sewage or organic portion of any of the sludge."

Subsidence of the roadway occurred at Farme Pit over the sewer there, but it was found on investigation that this was caused by a burst water pipe.

All the dustpans on the sewers in this district were cleaned out during the year and put in order.

One manhole on the main Cambuslang Road was observed to be seriously damaged. On investigation it was found that the corbelling of the brickwork had given way. This was caused by the Glasgow Corporation Water Department. In laying a water main along the roadway the workman had simply broken through the brickwork as an easier method than deviating from the straight line. If this had not been timeously noticed a serious accident to traffic could readily have taken place. Liability was admitted by the Glasgow Corporation Water Department, and the account for repairs rendered to them and paid.

Four manholes and one lamphole were raised to the surface level in the repaired Barnflat Street during the year.

The sewer at the top end of Barnflat Street, owing to the flat gradient, is very sluggish. It is expected that there will be an improved flow when the new Housing Scheme drains are connected thereto.

Attention was called to a defect in the drains at Eastfield Cottages. The owner, on being notified, protested that this was caused by a Middle Ward sewer laid in the roadway. The matter was reported to the Middle Ward Engineer for attention.

Complaint was made of surcharging of sewers at Springfield Park, Burnside, but on examination of the sewers they were found in order, and any flooding which had taken place was probably due to the excessive rainfall. Three gully gratings were, however, supplied by the Road Surveyor with a view to preventing flooding of the roadway at the lower end.

One manhole was constructed in Duchess Road at the junction with the new sewer from the housing site.

One manhole frame was replaced in Blairbeth Road owing to breakage.

Twenty-three connections were made to the sewers during the year.

The culvert at Burnside Buildings, Eastfield, which has caused so much trouble in past years by flooding over the roadway and entering the low-lying dwellings, was inspected during the year by an Inspector from the Board of Health, and it was decided thereafter that liability for repair rested with the Highways Department. Operations were commenced to effect repairs during May, under the supervision of the Highways Department. Considerable trouble was, however, caused by the breaking of drains, which was necessary to effect proper widening of the culvert, and it was only due to our vigilance that the work was ultimately satisfactorily finished. No doubt the risk of flooding has now been reduced, but even since completion the culvert has overflowed.

The following sewer was taken over as a public sewer:—12-inch sewer in Burnside Road at a cost of £93 17s. 1d. This sewer forms a connecting link with sewers that have already been taken over by the District Committee.

Bishopbriggs and Auchinairn.—The sewers in this district continue in good working order, there having been no surcharging during the year. It has been evident for a considerable time that there was at some point an infiltration of water to the sewers, which during excessive wet weather is rather alarming. So far we have been unable to trace this defect, but it can be readily understood that it is a difficult matter where everything is underground. We have received the instructions of the Committee to continue our search, and the engineers are going thoroughly into the matter.

During the year our attention was drawn to a manhole on the Kirkintilloch Road being in a condition dangerous to traffic. This was replaced by one of a heavier make.

An application was received from the engineers of Messrs Blackie & Sons, who are constructing new works on the west side of Kirkintilloch Road, to connect the field drains from a hockey pitch, which they had made for their workers, to the sewer. As we have already an excess of subsoil water entering our sewers the application

was refused, but on making inquiries at the works we were informed by the Clerk of Works that the surface drains were already connected. It was really an accomplished fact before the application had been received. The matter was reported to the Committee, who adhered to their decision that surface water should be excluded from the sewers in all cases where it can be otherwise disposed of, but, in view of Messrs Blackie & Sons' letter that the connection is only a temporary one, agreed that it be allowed to continue meantime, but without prejudice and only during their pleasure, and on the distinct condition that the surface water shall be disconnected whenever required by the Committee.

An extension of the sewer in Crosshill Road for a distance of 100 feet, which was approved by the Committee in 1926, was carried out. An extension of 19 yards to this sewer was submitted and approved of.

Sewage Disposal Works.—A new pump has been installed to empty the detritus chambers, which are cleaned out alternately every two weeks. This pump has proved of great success, as the tanks can be cleaned in about a quarter of the time it formerly took, and the sludge is delivered directly to the sludge pits.

During the year, as has been explained in the drainage report, we have had to deal with an excess of flow at the works. The dry weather flow was calculated at 10,000 gallons per hour and wet weather flow 30,000, but throughout the year the dry weather flow has never been less than 14,000, and in wet weather considerably in excess of 30,000 gallons per hour. The result of this excess of flow is detrimental to the percentage of activated sludge in the aerating tanks, which is continually varying, and is at times considerably less than the 10 per cent. which is the percentage at which the best results of finished effluent are obtained. At present the aerating cones are in action from 8 a.m. to 12 midnight, with the result that no aeration takes place from 12 midnight to 8 a.m. The effect of the crude sewage not being aerated is causing septic action to take place in the settling pockets. To remedy this the consent of the Committee has been obtained to instal a slow-motion motor to keep the sewage aerated during the night. This is expected to keep the sludge from settling.

Owing to the quantity of surplus sludge to be dealt with other two sludge pits have been laid down.

Six connections were made to the sewers during the year.

Stepps Drainage.—A chokeage took place in the 6-inch sewer in School Road, and on being opened up it was found that seven of the pipes were crushed, and it was necessary to lay seven new lengths of sewer piping. The chokeage would appear to have been caused by some heavy vehicle passing over the track of the sewer.

The Convener stated that the sewer referred to was laid by him some years ago for the drainage of houses which he had erected in School Road, and was not a public sewer, but that he was now prepared to hand it over to the Drainage Committee free of charge, and the Committee agreed to take over the sewer referred to as a public sewer.

A further complaint was received from the agent of a proprietor of property on the north side of Farm Road regarding flooding of his premises by a surcharge from the sewer during excessive wet weather. This matter was reported on in last year's report, and the Committee adhered to their former decision that proper care had not been exercised by the proprietor when his drains were laid.

A plan and section of a proposed new sewer at Mount Harriet Drive and Hornshill Road was submitted to the Committee for their approval. The sewer will be connected with the sewer formerly laid down by Sir Alexander Sprot, Bart., leading to Stepps Sewage Works.

The Committee approved of the plans on condition that the new sewer was constructed in accordance with the engineer's specification, and agreed to take it over on the usual terms. The sewer being outwith the drainage area, an obligation is required from Sir Alexander Sprot, Bart., to pay annually a sum in respect of the houses draining to the sewer equivalent to the Special Drainage assessment imposed on the Stepps Drainage District.

There being at present few houses draining to this sewer and little prospect of development in that area, the Committee agreed to recommend that no extension of the Drainage District be made in the meantime.

Application was made to the Committee by Sir Alexander Sprot to take over the sewer laid by him on Cumbernauld Road from Steppshill to Beechmount Cottage. The sewer has been laid to our engineer's specification, and there being sufficient valuation of the subjects draining to the sewer to meet the interest and sinking

fund on the cost of the sewer, viz., £419 10s. 3d., the Committee agreed to take it over as a public sewer.

The sewers were inspected during the year and all dustpans cleaned out.

Four connections were made to the sewers during the year.

Sewage Disposal Works.—The septic tanks were cleaned out twice during the year and the grounds and works regularly attended to.

There is nothing new to report with regard to the works, further than what was stated in the previous report.

Owing to the increased building operations in the district an extension of the filter beds seems desirable.

Uhryston and Muirhead.—The sewer manholes and dustpans were examined and cleaned during the year, the sewers being found in order.

Three permits were granted for connections to sewers.

One drainage system was reconstructed and smoke-tested.

One water-closet was erected and one privy demolished.

Sewage Disposal Works and Tanks.—The Bridgend Works were cleaned out twice during the year. The heavy road grit and silt is becoming very troublesome in these works. The filter trays are also requiring readjustment again, and I am of opinion that instead of this being done a percolating filter, either circular or rectangular, ought to be installed, as no great satisfaction has ever been obtained from this tray type of filter.

The disposal of the sludge is another serious question at these works. The present pits are outwith the works proper, and when they are full up there is a considerable depth of heavy sludge, and as this is unprotected it is a serious danger to children. A report regarding this was submitted to the Committee during the year, but nothing further has been done. It was suggested that a fence of some kind be erected round the pits.

Drumcavel tanks were cleaned once during the year.

Gartcosh Drainage.—The Sewage Works were cleansed twice during the year, and the resultant sludge removed by the farmer.

Before the end of the year alterations to the sewage works by way of reconstructing them to sedimentation tanks were commenced,

and a 9-inch pipe laid across the Bothlyn Burn to meet a pipe from Messrs. Smith & M'Lean's works, for the purpose of taking drainage from new water-closets and latrines erected there.

A complaint was received from an owner in Lochview Terrace regarding the nuisance created in his garden by putrefying sewage. After thorough inspection and examination it was found that this was caused from a sink in the house, which was not apparently caught up with the new connections made to the sewers when laid, and the result was that, as formerly, the sink was still draining through a cesspool to the loch. As the cesspool was disconnected when it was considered that all properties were connected to the sewer, the waste water from this sink burst the drain in the garden at a weak point, and thereafter continuously discharged thereto. As the owner considered that the Committee were responsible for not connecting this sink, although it was explained to him that the responsibility was entirely his own, it was decided to report the matter to the Special Drainage Committee for attention.

The matter could be rectified at small cost, but no meeting has yet been called to deal with the matter. Meantime, however, the drain has been cleared, and is discharging to the loch.

Carmunnock Drainage.—The tanks at the Disposal Works were cleaned out twice during the year and the sludge removed for disposal by farmers.

The dustpans of sewer manholes were also cleaned out.

With the exception of small minor troubles, which were readily remedied by the attendant, the works generally have given satisfaction.

Although sanction was given to construct a new efficient outfall pipe to the Kittoch Burn, this work had not been commenced at the end of the year.

Two connections were made to the sewers during the year.

Glenboig Drainage.—A Special Drainage District has been formed for both Lower and Middle Ward Districts. The proposed scheme for the drainage of the district, as mentioned in last year's report, was to cost £43,350. The Joint-Committee were of opinion that the cost was too high, and it was remitted to the engineers to bring forward a modified scheme. The Lower Ward engineer submitted

a scheme on the Ames Crosta Activated Sludge System, the estimated cost of which was to be £20,048. It was further thought desirable to obtain a report from a mining engineer as to the site of the proposed works, but at the end of the year this had not been received.

LIGHTING.

Special Districts.

During the year the boundaries of North Shettleston Lighting District were extended to include the 542 houses erected by the Second National Housing Trust, Limited.

A special Lighting District has been formed for the village of Carmunnock, on the requisition of the Parish Council. As the Clyde Valley Electrical Power Company have mains in the village, it was decided that the illuminant should be electricity.

An application was received by the District Committee from Messrs. James Nimmo & Company, Ltd., to take over and maintain the lighting of the village of Wester Auchinloch, which is presently lighted by and the property of the company. The company's proposal was that the South Lenzie Special District should be extended to include Wester Auchinloch, and that the Committee should purchase the lamps and cables already erected for the sum of £200, and be responsible for the erection of further lamps.

The Committee recalled that the proposal was for the taking over as public the lighting of a village erected and owned by Messrs. James Nimmo & Co., for the accommodation of their own work-people, and which at present they were lighting themselves, but desired to be relieved by the Public Authority, and, having regard to the terms and conditions asked by Messrs. James Nimmo & Co., the Committee agreed to take no further steps in the meantime.

SCAVENGING DISTRICTS.

There are seven Special Scavenging Districts in the Lower Ward, which embrace all the populous areas, with the exception of Glenboig and Carmunnock.

With regard to Carmunnock, owing to the increased housing in the village, it is becoming more essential that a Special District be formed, so that the disposal of household refuse be put on a better footing.

North Shettleston.—A daily collection and removal of household refuse is maintained from the tenement property, the refuse being delivered, as formerly, to the Glasgow Corporation Refuse Destructor Works at Haghill.

The estimated quantity of refuse collected during the year was 509 tons 2 cwts., and 37 tons of mud and sweepings from private streets and lanes were deposited in the coup. The back-courts, private streets, and lanes were regularly cleansed.

In view of the extension of the existing boundaries of the district it will be necessary to put on another dust float to cope with the extra work involved.

Complaints were received regarding the condition of the private portion of Budhill Avenue, especially during the winter months. Our Road Surveyor was scarifying a public highway in the vicinity, and an arrangement was come to whereby the scarified metal was deposited on the road in question and spread evenly. This has resulted in the road being in much better condition, and will continue so for some time.

Considerable trouble has been experienced in scavenging the back-courts at the west end of Budhill Avenue owing to their muddy condition. The proprietor, however, has been prevailed on to asphalt the courts, which has created an entirely different position, and is greatly appreciated by the tenants concerned. 30 new dustbins were supplied during the year.

Rutherglen.—The work is being maintained by the same contractor and in the same satisfactory manner. Owing to the considerable increase in building in this area, as stated in last year's report, consideration of quicker transport and more efficient cleansing will require to be gone into.

929 tons of refuse were collected during the year.

43 new dustbins were supplied during the year.

There is no improvement in the speedy supply of dustbins to some tenement properties, but it must be recorded that this part of the district is better catered for than other areas. This district has splendid closed carts in use for the removal of the refuse.

Numerous points crop up during the year with regard to the definition of household refuse. A large quantity of wallpaper was questioned by the contractor, and as the work of removal of the

old paper from the walls had been done by the tradesmen, it was considered that the tradesmen ought to arrange for removal and disposal. Another sore point in this district is the disposal of garden refuse. There is a lane at the back of some terrace and villa houses acting as a road of access for scavenging carts, &c., and this lane is repeatedly littered with garden refuse. No amount of posting of notices warning the adjoining owners has the slightest effect.

Bishopbriggs and Auchinairn.—The system of scavenging was altered by the Committee as from 15th May. They now employ a scavenger and hire a horse and man per day. The work has been expeditiously carried out, and is a great improvement on what was done previously. The district was mapped out, and a weekly collection of refuse is maintained. The work is now systematically carried out, and during the year there has not been a complaint. The Committee have also supplied a covered cart, which has been of great advantage, and, besides being more hygienic, saves time by taking a larger load to the coup than could be done formerly. The refuse is still being deposited at the disused pit on the lands of Springfield, and is being maintained in good order.

Ten dustbins were replaced during the year.

Chryston and Muirhead.—Since 15th May last it has been necessary, as was suggested in my report of last year, to employ the scavenger whole time in this district. This means that there are two men and one horse kept fully employed throughout the year.

Such increase was brought about by the large number of houses erected under the District Committee's Housing Schemes, and although houses were closed where the tenants were granted houses in the new schemes, such closed houses were almost wholly outwith the Scavenging District, thus there was actually a direct increase in the population within the Scavenging District.

The work has generally been carried out well without any serious complaints being received. I must still, however, express the opinion that it is advisable that a bi-weekly collection of refuse should be carried out at the tenement property.

A report was submitted to the Cleansing Committee last year recommending the purchase of a scavenging cart. The Committee, however, did not agree with my recommendation, and the open cart

is still in use. In the interest of public health I still consider that a closed cart is necessary.

During the year a suggestion was made by this Department to include the village of Moodiesburn within the scavenging area owing to the difficulty experienced in getting the tenants to dispose of their refuse properly and efficiently. The village is only a short distance from the boundaries of this district, and no great cost would have been involved, and in comparison with the general improvement which would have been obtained in the village it would have been worth it. The Scavenging Committee, however, would not agree to the suggestion.

It was advised during the year that a turntable be made in the lane at the rear of Woodside Gardens, adjoining the Garnkirk Housing Scheme, to allow of the scavenging cart being turned therein, as meantime the cart had to be backed one way or the other. Nothing had been done at the end of the year to assist.

1,074 cart loads of refuse were deposited in the coup.

116 dustbins were supplied during the year.

Stepps.—Owing to the increase in the size of this district, and with the inclusion of the Millerston Housing Scheme, it was necessary to employ the horse and cart with two men for five days per week, and on Saturday the scavenger attends to the cleaning and general levelling of the coup. The work has, on the whole, been successfully carried out. Several complaints were received, which were attributed to the carelessness of the scavenger, who has been dismissed, and since then the work has run smoothly.

The refuse is still being deposited on low-lying ground on the west side of Magazine Road, and is at times rather unsightly. This is caused by the spreading of the refuse over an area, and unless regularly attended to gets very quickly out of hand.

865 cartloads of refuse were deposited in the coup.

Six dustbins were supplied during the year.

Lenzie.—The work in this district is still let on contract, and has been carried on by the same contractor as last year in a satisfactory manner.

Complaints were received regarding refuse in ashpits being on fire. On inquiry being made it was found that to dispose of their

waste paper the refuse had been set on fire by the message boy from one of the shops. The shopkeepers were warned, and this practice has now ceased.

The refuse is deposited in Boghead Quarry, and no complaints were received during the year.

Three dustbins were supplied during the year.

Gartcosh.—This work has been carried out by the private contractor during the year quite efficiently, and no complaints have been received. There are, however, a number of privies and privy middens at property owned by Messrs. Smith and M'Lean, and communication was again made to the owners regarding this, and a promise extracted that the work of converting such privies to water-closets would be carried out as speedily as possible.

28 dustbins were supplied to the Housing Scheme.

SPECIAL DISTRICTS.

The Special Districts for the purposes of Water Supply, Drainage and Sewage Disposal, Scavenging and Lighting, are shown in the following table. The rates of assessment (half owners, half occupiers) for the year 1927-28 are also shown. A blank in the assessment column means that no district has been formed for the special purpose indicated:—

District.	Parish.	Water.	Rate of Assessment per £			
			Drainage.	Sewage Purification.	Scavenging.	Lighting.
Bishopbriggs and Auchinairn.	Glasgow and Cadder.	1/4	1/8	—	3d.	5½d.
(a) Cadder.	do.	1/4	—	—	—	—
Carmunnock.	Carmunnock.	3/-	1/5	—	—	—
Chryston and Muirhead.	Cadder.	1/4	1/3½	—	7d.	4½d.
Gartcosh.	do.	1/4	4½d.	—	3d.	—
(b) North Shettleston.	Glasgow.	Levied (e) 5·89d. by Glasgow.	(f) 9d.	5½d.	8½d.	
Rutherglen.	Rutherglen.	do.	2d.	(e) 5·89d.	4d.	6½d.
South Lenzie.	Cadder.	8½d.	3d.	—	5d.	4½d.
Stepps.	do.	1/4	8d.	—	5d.	4½d.
Glenboig Lighting.		—	—	—	—	6d.

NOTES.—(a) The Cadder Water Supply District includes part of Bishopbriggs, Cadder Village, Auchinloch, Mavis Valley, Jellyhill, Steppe, Chryston and Muirhead, Bridgend, Mossvale, Heathfield,

Garnkirk, Moodiesburn, Mollinsburn, Gartcosh and Garnqueen; (b) *Glasgow Water* is supplied to Budhill, Springboig, Sandyhills, North Mount Vernon, part of Carntyne, Lightburn, Colston, and part of Bishopbriggs in Glasgow Parish; Auchinairn, in Cadder Parish; and Farme, Eastfield, and part of Burnside in Rutherglen Parish; (c) Barony Drainage; (d) no assessment for Drainage; (e) Glasgow Sewage Purification Area assessment; (f) Southern portion of District outwith Glasgow Sewage Purification Area.

NUISANCES.

The following summaries show the number of nuisances dealt with in each parish, and the number of intimations and notices served, &c. :—

	Glasgow (late Barony).	Cadder.	Rutherglen.	Carmunnoch.	Total.
Recurring Nuisances under Section 16, Sub-secs. 2, 5, and 7,	10	40	63	8	121
Structural Nuisances under Section 16, Sub-secs. 3, 4, 6, 8, 9, and 10, - - -	—	7	4	—	11
	10	47	67	8	132

Intimations served in terms of Section 19 of the Public Health Act, 1897, - - - - -	132
Notices served in terms of Section 20, - - - - -	1
Notices served in terms of Section 40, - - - - -	2
Notices served in terms of Section 117, of the Burgh Police (Scotland) Act, 1892, - - - - -	29
Number of letters calling attention to insanitary con- ditions in addition to those dealt with by formal intimation, - - - - -	206

In connection with the above statement, 8,191 visits were made for the detection of nuisances and in connection with complaints received, which numbered 118. The majority of nuisances dealt with were, as usual, due to choked or otherwise defective drains. It will be noted that the number of recurring nuisances from year to year is gradually becoming less, and I believe that the people

are becoming more alive to the benefits derived from the proper use of their drains and conveniences.

One instance of the damage done by bugs was brought to the notice of the Department, and ultimately the owners were prevailed upon to strip the plaster from the walls of a two-apartment house, also the wood facings. The house was then thoroughly fumigated with sulphur and the walls limewashed and re-plastered, and this has apparently remedied the trouble. Another house, which was troubled greatly with an invasion of a very small fly, which affected the window facings of the room apartment, was dealt with, and the problem created serious difficulties. No amount of sulphur fumigation and washing with strong disinfectant fluid seemed to have any appreciable effect, and ultimately, as the house was on our condemned list of dwellings, a Closing Order was obtained, and the tenant granted a house in one of the Housing Schemes.

A private refuse coup, owing to its proximity to the public highway and to a public school, was complained of creating a nuisance of flies, &c. The colliery company, being responsible, on representation ceased using it for the disposal of household refuse.

Repeated complaints were received during the year against a fish and chip shop, both in respect of smell and of the issue of smoke from the stove chimney. After inspection the opinion was expressed by the Assistant Medical Officer that no action could be taken by this Department, but the owner was, nevertheless, requested to supply a modern cooking range. Nothing further had been done at the end of the year.

There are at present throughout our District four fish and chip shops, and complaints more or less have been received about them all, especially when they are in tenement property. In my opinion these premises should be licensed by the Local Authority and by-laws laid down for the conduct of the business.

Several cases of overcrowding were investigated during the year, the worst case being where a mixed family of 13 inmates occupied a single apartment. Including this family, several others have been granted houses in the District Committee's Housing Schemes.

HOUSE DRAINS.

276 visits were made relative to the condition of house drains and the provision of water closets, &c. 83 inspections were made

of the drainage system of properties including visits during work of repair and reconstruction. 7 drainage systems were found defective. 7 applications of the smoke-test were made to 7 properties, and the defects made good. In addition, 6 drainage systems were reconstructed and 11 water-closets provided. 36 connections were made to the public sewers and 7 connections to private sewers, and 180 visits to the Sewage Disposal Works in the several districts.

In accordance with the Scottish Board of Health's circular of 17th January, 1927, I submit the following statement—(1) as to the number of common water-closets in use; (2) number of houses without water supply and sink inside the house; (3) number of (a) dry closets; (b) privy middens; (c) ashpits, showing for each separately the number serving 2, 3, 4, 5, and more tenants respectively :—

1. In the Lower Ward District there are 412 water-closets used by more than one tenant, viz. :—

94 serve two tenants each; 251 serve three tenants each; 49 serve four tenants each; 8 serve five tenants each; 4 serve six tenants each; 5 serve seven tenants each; and 1 serves eight tenants.

These water-closets are in the following localities :—Rutherglen Drainage District, 202; Chryston and Muirhead Drainage District, 55; Gartcosh Drainage District, 25; Carmunnock Drainage District, 25; Glenboig Village, 4; Bishopbriggs and Auchinairn Drainage District, 54; Stepps Drainage District, 2; South Lenzie Drainage District, 11; Barony Drainage District—Shettleston, 34.

2. There are 284 houses in the district without water supply and sink inside the house. These houses are situated in the following localities :—

Rutherglen Drainage District, 58; Chryston and Muirhead Drainage District, 6; Gartcosh Drainage District, 23; Carmunnock Drainage District, 11; Glenboig, 39; Mollinsburn, 15; Garnkirk Square, 6; Heathfield Square, 56; Bishopbriggs and Auchinairn Drainage District, 7; Mavis Valley, 63.

3. (a) The total number of dry closets in the district amounts to 155, these being used by the following number of tenants :—

42 serve one tenant each; 36 serve two tenants each; 46 serve three tenants each; 22 serve four tenants each; 1 serves five tenants; 4 serve seven tenants each. 4 dry closets and 1 urinal are used by the inhabitants of Garnkirk Square, there being separate privies for males and females.

These dry closets are situated in the following localities :—

Rutherglen Drainage District, 2; Chryston and Muirhead Drainage District, 4; Gartcosh Drainage District, 23; Carmunnock Drainage

District, 2; Glenboig, 23; Mollinsburn, 12; Garnkirk Square, 4 dry closets and 1 urinal; Heathfield Square, 14; Bishopbriggs and Auchinairn Drainage, 15; Mavis Valley, 56.

(b) There are 43 privy middens, serving the following number of tenants:—

15 serve one tenant each; 1 serves two tenants; 14 serve four tenants; 1 serves five tenants; 1 serves seven tenants; 5 serve nine tenants each; 2 serve fourteen tenants each; 2 serve fifteen tenants each; and 2 serve eighteen tenants each.

These privy middens are situated in the following localities:—

Rutherglen Drainage District, 1; Chryston and Muirhead Drainage District, 4; Gartcosh Drainage District, 6; Carmunnock Drainage District, 2; Glenboig Village, 12; Mollinsburn, 7; Garnkirk Square, 1; Heathfield Square, 4; Bishopbriggs and Auchinairn Drainage District, 1; and Mavis Valley, 5.

(c) There are 124 ashpits in the district, each serving the following number of tenants:—

36 serve one tenant each; 5 serve two tenants each; 8 serve three tenants each; 10 serve four tenants each; 60 serve five tenants each; 5 serve six tenants each.

These ashpits are situated in the following localities:—

Rutherglen Drainage District, 23; Chryston and Muirhead Drainage District, 24; Carmunnock Drainage District, 12; Glenboig, 1; Bishopbriggs and Auchinairn Drainage District, 29; Stepps Drainage District, 11; South Lenzie Drainage District, 9; and Mavis Valley, 15.

COMMON CLOSES, STAIRS, AND WATER-CLOSETS.

In connection with the by-laws relating to the cleansing of closes, stairs, and water-closets at tenement properties, 267 inspections were made. 29 notices in terms of Section 117 of the Burgh Police (Scotland) Act, 1892, were issued, requiring the owners to whitewash closes and staircases, and 57 closes and staircases were whitewashed. In addition, 31 letters of warning were issued *re* improperly fouling and abusing water-closets.

INFECTIOUS DISEASE.

299 visits of inquiry were made by the Sanitary Officers; the disinfection of 151 apartments and 153 sets of bedding and articles of clothing was carried out. 585 intimations to parents and school teachers were issued.

OFFENSIVE TRADES.

The number of offensive businesses on the register at the close of the year was 5. The nature of the businesses comprise the following :—2 soap works at Bishopbriggs, 1 fish meal and manure works at Rutherglen, 1 blood work and 1 tallow and gut work situated at Carntyne, Shettleston.

The two soap works at Bishopbriggs continue to be very quiet, little business being carried out in one, and the other has not been in operation for about nine months.

The blood work continues to be carried on in a satisfactory manner. One complaint was received, and that concerned the blood in the barrels having become putrid, and while in course of being removed from the railway station to the works some of the barrels burst, and the contents were deposited on the road.

The tallow and gut work continues to be carried out in a satisfactory manner.

The fish meal and manure work continues under strict supervision. Only one serious complaint from an outside source was received during the year. Numerous complaints were made by the Sanitary Inspector during the year, and it must be said that all suggestions made by the Department were immediately complied with. The disposal of herring offal created most trouble, and at the beginning of the year a large quantity of eight-year-old barrels of herring had to be summarily disposed of.

Considerable improvements have been carried out on the premises generally, and a new vapour washing tank and tower were erected, and have given good results since.

Improved machinery and better treatment in this type of business is a daily occurrence, and there is no doubt that under good conditions and with great care this business can be conducted without undue nuisance being created. Nevertheless, strict supervision is still required by the officials. I can only repeat that by-laws are still necessary for more efficient control being exercised.

PUBLIC SCHOOLS.

The public schools were visited as time permitted, but being under the control of a Master of Works, appointed by the Education Authority, a regular system of cleaning and painting is carried out.

PRIVATE STREETS.

In connection with Section 39 of the Public Health (Scotland) Act, a good deal of our time is taken up in preparing plans, schedules, and specifications of repair of private streets. During the year Barnflat Street and Avenue Street were re-made in conjunction with the Housing Committee, who were responsible for one half of the respective streets.

The following private streets were, after repair, assumed as public highways:—

GARTCOSH DISTRICT.

Kirkhill Road from Lochend Road eastwards.
 Eastgate Road to Kirkhill Road to junction with Beard Crescent.
 Manor Road from Lochend Road to Eastgate Road.
 Mowbray Avenue from Manor Road to Lochend Road.
 Jardine Terrace from Eastgate Road to Mowbray Avenue.
 Mowbray Avenue to Eastgate Road westwards.
 Beard Crescent from Mowbray Avenue to Eastgate Road.
 Woodneuk Road from Mowbray Avenue eastwards.

BURNSIDE DISTRICT.

Burnside Road from termination of the existing highway at entrance to Burnside Farm to Cathkin Road.
 Tynwald Avenue from Burnside Road eastwards.

Housing Schemes.

CARMUNNOCK.

Hillcrest Road from Carmunnock Road south-westwards.
 Windlaw Road from Carmunnock Road northwards.

RUTHERGLEN (EASTFIELD).

Broomfield Avenue from Cambuslang Road southwards.
 Whinfield Avenue from Cambuslang Road southwards.
 County Avenue from Broomfield Avenue westwards and eastwards.

GARNKIRK.

Laurelbank Road from Woodhead Road eastwards.

AUCHINAIRN.

Montrose Terrace from Auchinairn Road northwards.
 Graham Terrace from Auchinairn Road northwards.

FACTORIES AND WORKSHOPS.

No communications were received from H.M. Inspector of Factories during the year. 124 visits were made to factories and 34 to workshops. Inspections were made of sanitary conveniences, which were generally in good condition. Four water-closets and one washhand basin were fixed in three workshops during the year.

Three lists of outworkers were received from other Local Authorities during the year.

Five notices were served requiring whitewashing of premises, &c.

The register of workshops at the end of the year contains the following in each parish—Barony, 1; Cadder, 49; Rutherglen, 3; Carmunnock, 8, classified as follows:—

Dressmakers and Tailors, - - -	3
Boot and Shoe Makers, - - -	12
Blacksmiths, - - - - -	4
Joiners, - - - - -	9
Painters, - - - - -	3
Plumbers, - - - - -	8
Slaters, - - - - -	4
Builders, - - - - -	4
Bakehouses, - - - - -	2
Concrete Block Manufacturers,	1
Laundry, - - - - -	1
Miscellaneous, - - - - -	10
	<hr/>
	61

DAIRIES AND COWSHEDS.

The number of cowkeepers and dairymen on the register at 1st January, 1927, was 130, and on register at 31st December, 1927, 135. Seven were registered during the year and two removed from the register. The total comprises the following:—Producers, 64; producers and retailers, 34; retailers or purveyors, 34; butter-makers, 3.

The average number of cows in milk during the year was 2,000.

55 inspections were made of dairy premises during the year, which generally are kept in good order.

This work has not been fully supervised during the year owing to the stress of housing work, and to the fact that all the premises were provisionally registered to May, 1928, to allow of the owners and tenants carrying out the necessary repairs to their premises. Visits of inspection were made and advice given to tradesmen and tenants, &c., regarding the minimum requirements which are allowed in terms of the By-Laws.

Several of the dairy premises have been improved structurally, but we are looking forward to the majority being brought up to date during the summer months.

Inspection and report was made to the Medical Officer of Health regarding Gartloch Farm, on an application being made by the Parish Council of Glasgow, for the purpose of granting a licence for the supply of certified milk.

SEASONAL WORKERS.

6 applications were received from farmers and employers to house male and female workers at three farms. As has been stated in previous reports, the accommodation provided at these farms is not of a high standard, but cannot altogether be objected to. The Board of Health Inspector visited these farms, and is of the same opinion as myself regarding the premises.

PIGGERIES.

The number of piggeries on the register at 31st December, 1927, was 32, and the approximate number of pigs in the district, including those at farm steadings and public institutions, was 3,205.

142 inspections were made to premises during the year. The premises have been generally kept clean and in good state of repair.

The following plans were submitted and approved of by the committee:—extension of piggery at Easter Cadder Farm, Bishopbriggs; erection of new piggery at Rosebank, Cambuslang; and erection of new premises at Mossvale, Muirhead, Chryston. All these premises were completed at the end of the year.

BURIAL GROUNDS.

2 inspections were made of burial grounds in the district, which were found in order. 4 burials were carried out in terms of Section 69 of the Public Health Act. In one case the cost of burial was recovered.

**STATEMENT BY THE SANITARY INSPECTOR OF PROCEEDINGS
UNDER THE PUBLIC HEALTH ACTS, 1897, HOUSING &c.,
(SCOTLAND) ACTS, 1909 TO 1925, AND OTHER ACTS,
DURING THE YEAR 1927.**

Nuisances.

Complaints received (verbal and written),	...	...	...	...	118
Visits of inquiry and inspection,	...	...	...	...	8,191
Intimations served in terms of Section 19 of Public Health Act,	...	...	...	...	132
Notices served in terms of Section 20 of Public Health Act,	...	...	...	...	1
Notices served in terms of Section 40 of Public Health Act,	...	...	...	...	2
Insanitary conditions dealt with by letter (letters issued),	...	...	...	...	206
Number of recurring nuisances dealt with by intimation,	...	...	...	...	121
Number of structural nuisances dealt with by intimation,	...	...	...	...	11
Nuisances abated,	...	...	...	...	133
Nuisances outstanding at 31st December, 1927,	...	...	...	...	6

Infectious Disease.

Visits of inquiry &c.,	...	...	...	...	...	299
Apartments disinfected by Sanitary Inspectors and Health Visitors,	...	...	...	...	...	151
School apartments disinfected,	...	...	...	...	...	2
Bedding and articles of clothing disinfected by Sanitary Inspectors and Health Visitors,	...	...	...	...	...	153
Intimations to parents and school teachers,	...	...	...	...	...	585
Throat and Nose Swabs taken,	...	...	...	...	...	48

Factories and Workshops.

Factory inspections,	...	...	...	...	...	124
Workshop inspections,	...	...	...	...	...	35
Intimations of outworkers received from other Local Authorities,	...	...	...	...	...	3
Inspections of outworkers premises,	...	...	...	...	...	1
Workshops registered during the year,	...	...	...	...	...	7
Removed from register,	...	...	...	...	...	5
Notices served,	...	...	...	...	...	1

Cowsheds and Dairies.

Number on Register at 1st January, 1927,	...	...	...	...	130
Registered during the year,	...	...	...	...	7
Removed from Register,	...	...	...	...	2
On Register at 31st December, 1927,	...	...	...	...	135
Inspections of dairy premises,	...	...	...	...	55
Letters to registered occupiers and owners,	...	...	...	...	127

Offensive Trades.

On Register at 1st January, 1927,	5
Applications for sanction to establish,	—
On register at 31st December, 1927,	5
Inspections,	130
Contraventions dealt with,	7
Letters to owners,	7

Drainage.

Visits <i>re</i> condition of house drains,	276
Drain inspections,	83
Defective drains disclosed,	1
Defects remedied,	1
Drainage systems remedied or reconstructed,	6
Applications of smoke-test,	7
Number of properties tested,	7
Visits <i>re</i> provision of water-closets,	8
New water-closets provided,	11
Connections to public sewers,	36
Inspections of connections,	39
Connections to private sewers,	7
Inspections of private sewers,	4
Sewer inspections <i>re</i> defects or chokages, &c.,	10
Sewer cleansing inspections,	33
Sewer silt samples taken,	3
Inspections of Sewage Purification Works,	180
Sewage Works cleansed,	4
Dustpans cleansed—Districts,	5
Visits <i>re</i> flooding and pollution of burns and foul ditches,	5

Building By-Laws.**New Buildings, Alterations, Additions, &c.**

Number of plans lodged,	48
Number of plans approved,	46
Visits <i>re</i> plans lodged,	25
Inspections of new buildings, alterations, additions, &c., by Building Inspector,	1,536
Applications of smoke test to drains and plumber work,	456
Number of properties tested,	478
Houses passed for occupancy,	562
Workshops passed for occupancy,	1
Additions passed for occupancy,	1

District Committee's Housing Scheme.

Visits by Building Inspector <i>re</i> sites, formation of roads, &c.,	103
Inspections <i>re</i> progress of works,	865

Housing, &c. (Scotland) Acts, 1909 to 1925.

Number of dwelling houses inspected,	306
Houses considered unfit for human habitation,	243
Houses in which defects were remedied by owners,	31
Representations made to Local Authority,	243
Houses for which Closing Orders were made,	202
Houses closed (voluntarily),	6
Houses demolished,	112
Notices served,	37

Miscellaneous.

Cemeteries—Inspections of burial grounds,	2
Visits <i>re</i> applications for burial,	10
Burials in terms of Section 69 of Public Health Act,	4
Pig-styes :—	
Number on Register at 31st December, 1927,	33
Inspections,	142
Approximate number of pigs in district at 31st December, 1927,	3,205
Visits to premises alleged to be infested with rats,	10
Rat poison supplied,	3
House-to-house visits for the detection of dirty or overcrowded houses,	569
Refuse Coups—Inspections,	14
Visits <i>re</i> water supplies,	6
Samples of water taken for analysis,	1
Water supply introduced to houses,	1
Visits <i>re</i> housing of seasonal workers,	5
Ice Cream Shops—Inspections,	2
Fish and Chip Shops—Inspections,	2
Smoke observations,	4
Common closes, stairs and water closets—Inspections,	267
Notices to owners in terms of Section 117 of Burgh Police Act,	29
Closes and stair walls whitewashed,	57
Notice and letter warnings <i>re</i> improperly fouling water closets,	31
Private streets and lanes—Inspections,	36
Special Inspection <i>re</i> Street Lighting Report,	1
Scavenging—	
Inspections in Special Districts,	5,530
Notices posted <i>re</i> Garden Refuse disposal,	6
Dustbins provided and renewed,	109
Unsound Food—	
Inspections of premises,	2
Inspections of food,	2

Lightburn Joint-Hospital.

Annual Report, 1927.

RESIDENT PHYSICIAN—H. MUIR DAVIE, M.B., Ch.B.

MATRON—Miss TOWNSEND, R.R.C.

The admissions and discharges during the year, classified according to the disease notified and according to the constituent authority, are shown in Table A and Table B respectively.

TABLE A.

Admissions and discharges, and number of patients in Hospital at the beginning and end of year, classified according to the disease notified.

Disease.	In Hospital Jan. 1st, 1927.	Admitted.	Discharged. Recovered.	Died.	In Hospital. Dec. 31st, 1927.
Scarlatina, ...	24	188	178	4	30
Diphtheria, ...	13	135	107	5	36
Pneumonia, ...	10	150	122	24	14
Erysipelas, ...	1	14	13	—	2
Tuberculosis, ...	19	46	46	4	16
Puerperal Infection, ...	—	3	2	1	—
Measles, ...	—	3	3	—	—
Encephalitis Lethargica, ...	—	2	1	1	—
Meningitis, ...	—	5	1	4	—
Others,* ...	—	8	8	—	—
	67	554	481	43	98

*Varicella, 3; Whooping Cough, Tonsillitis, Pediculosis, Ophthalmia Neonatorum, Faecal fistula.

TABLE B.

Cases Classified according to constituent authority.

Disease.	Lower Ward, Lanark.	Middle Ward, Lanark.	City of Glasgow.	Rutherglen. Burgh.
Scarlatina, ...	56	71	61	—
Diphtheria, ...	60	37	37	1
Pneumonia, ...	35	43	72	—
Erysipelas, ...	5	4	5	—
Tuberculosis, ...	43	1	—	2
Puerperal Infection, ...	2	—	1	—
Measles, ...	2	1	—	—
Encephalitis Lethargica, ...	1	—	1	—
Meningitis, ...	2	—	3	—
Others, ...	5	2	2	—
	211	159	182	3

Compared with last year's returns, there was a slight decrease in the total number of admissions. There was an increase in the number of cases of pneumonia admitted, and a decrease in the number of cases of scarlatina admitted, the figures for other diseases being fairly constant.

The number of deaths was 43. Six of these died within twenty-four hours of admission, and have been excluded in calculating the fatality rate. The figures, thus corrected, give a fatality rate of 7.07 per cent. calculated on discharges. The figure for the year 1926 was 7.4 per cent.

The average monthly rate of admission was 46.3, the lowest number of admissions occurring in July and the greatest number in October, the figures being 23 and 71 respectively.

The average daily number of patients resident was 63.3. The highest number in residence was 107 on 27th December, and the lowest 36 on 24th August.

Scarlet Fever.

24 cases were in hospital at the beginning of the year. The number of cases admitted was 188, and at the end of the year there remained in hospital 30 cases. 178 recovered, and 4 died, giving a fatality rate of slightly over 2 per cent.

ALTERED DIAGNOSIS.—In 3 cases the diagnosis was altered, the revised diagnosis being—Measles, 1; erythema multiforme, 1; and urticaria, 1.

FATAL CASES.—One of these was of the septic type. Two died of broncho-pneumonia as a complication. The other case, a man of 24, died a few hours after admission, and was diagnosed as septic tonsillitis.

SEVERE CASES.—4 cases were of a severe type. All received antistreptococcal serum. Complications occurred in these cases as follows:—Otitis media, 3; rhinitis, 3; adenitis, 2. The average period of residence was 84 days.

MILD CASES.—The remainder of the cases were of the moderate type. Complications occurred as follows:—Adenitis, 19; rhinitis, 16; otitis media, 18; nephritis with albuminuria, 7; arthritis, 4; serum urticaria, 1. 5 cases developed chickenpox. The average period of residence was 35 days.

Diphtheria.

13 cases were in hospital at the beginning of the year. 135 were admitted and 107 discharged, and 36 remained in hospital at the end of the year. During the year 5 cases died.

FATAL CASES.—Of the 5 fatal cases, 2 were faucial, 2 laryngeal, and 1 faucial and laryngeal. These cases received on an average 32,000 units of antitoxin. The average period of residence was 4 days.

Tracheotomy was performed on 5 cases, and an average of 20,000 units of antitoxin were administered; 3 recovered.

RECOVERED CASES.—In the 107 recovered cases the distribution of the disease was as follows:—Faucial, 90; faucial and pharyngeal, 1; faucial and nasal, 3; faucial and laryngeal, 3; laryngeal, 2; and in 8, although no symptoms were present, the organism had been recovered from the throat. The average period of residence was 41 days.

SEVERE AND MILD CASES.—Here the average number of days' residence was 47.4. The average amount of antitoxin given was 16,000 units.

Complications occurred as follows:—Cardiac irregularity, 12; serum rashes, 8; adenitis, 6; paralysis, 5, all palatal with ultimate recovery; otitis media, 1; pneumonia, 1; while 3 cases developed chickenpox and 1 case scarlet fever.

7 cases received antitoxin before admission to hospital.

Pneumonia.

10 cases were in hospital at the beginning of the year. 150 cases were admitted, 122 discharged, and 24 died, leaving 14 cases in hospital at the end of the year.

CORRECTED DIAGNOSIS.—Of the 150 cases admitted, the diagnosis was altered in 5 instances, the corrected diagnosis being:—Bronchitis, 3; pleurisy with effusion, 1; influenza, 1.

FATAL CASES.—Of the 24 fatal cases, 11 were over 14 years of age, and 13 under that age. In the former group, the average age was 49 years, and the average period of residence 5 days. Three of these cases occurred during the course of influenza; one was lobular in type, the others being lobar.

In the cases under 14 years of age, the average age was 2 years, and the average period of residence 7 days; 1 case followed pertussis, 4 followed measles, and all were lobular in type.

RECOVERED CASES.—CASES OVER 14 YEARS OF AGE.—3 cases were lobular in type, the others being of the acute lobar type. Complications met with were as follows:—Empyema, 1; arthritis, 1; albuminuria, 2; otitis media, 1; pleurisy with effusion, 1. The average age of these cases was 30 years, and the average period of residence was 27 days.

CASES UNDER 14 YEARS.—All except 14 were lobular in type, these 14 being lobar. Complications met with were as follows:—Empyema, 1; pericarditis, 1; otitis media, 3; adenitis, 1; while 5 cases developed varicella. The average age of these cases was 5 years, and the average period of residence 28 days.

Erysipelas.

1 case was in hospital at the beginning of the year, 14 were admitted, and 13 recovered, leaving 2 cases in hospital at the end of the year.

RECOVERED CASES.—Of the 13 recovered cases, in 6 the head was affected; in 4 the leg; in 1 the arm; and in 1 the trunk. In one case the diagnosis was altered to seborrhœic eczema.

Puerperal Fever.

No cases were in hospital at the beginning of the year. 3 were admitted, 2 recovered, and 1 died.

2 cases were attended by a doctor and midwife, 1 case by a midwife alone.

Treatment consisted in douching and nursing in the semi-recumbent position.

Cerebro-Spinal Fever.

No cases were in hospital at the beginning of the year. 5 cases were admitted; 1 recovered and 4 died.

FATAL CASES.—One of these, a woman of 36, proved to be suffering from cancer cachexia. Another, a child of 1 year, was proved to be tubercular meningitis, by examination of the cerebro-spinal fluid, while the remaining two, both children under 3 years of age, died soon after admission.

RECOVERED CASE.—This was a child of 1½ years, which proved to be suffering from bilateral otitis.

Tuberculosis.

18 cases were in residence at the commencement of the year. 46 cases were admitted, 45 discharged, and 4 died, leaving 15 cases in hospital at the end of the year.

FATAL CASES.—The fatal cases, 4 in number, were all pulmonary, 3 being males and 1 female. The average age was 31 years.

DISCHARGES. 45 cases were discharged, classified as follows:—

Pulmonary,	26	Improved.
Glandular,	4	„
Joint,	11	„
Lupus,	2	„
Altered diagnosis,	2	cases with no evidence of tubercle.

ALTERED DIAGNOSIS.—2 cases were discharged in which no evidence of tuberculosis was found, the condition being due in one case to malnutrition, and in the other to congenital syphilis.

15 cases were sent to Motherwell County Hospital for X-ray examination. 12 gave a positive result.

The duration of stay in hospital was over three months in most cases.

The ultra-violet ray lamp was used during the winter months, and proved of great use as an adjuvant to other treatment, in non-pulmonary cases.

As in previous years, the social side of the treatment was not neglected, an enjoyable series of concerts being sustained throughout the winter.

Measles.

No cases were in hospital at the beginning of the year. 3 cases were admitted and 3 discharged. One was a child of 3 years, the other 2 being nurses. All were uncomplicated.

Encephalitis Lethargica.

There were no cases in hospital at the beginning of the year. 2 were admitted, 1 discharged, and 1 died.

RECOVERED CASE.—This was a man of 26 years. The condition proved to be cerebro-spinal meningitis, and was recovered from, under treatment with anti-meningococcic serum.

FATAL CASE.—This was a boy of 15 years, who died 5 days after admission, the condition being one of acidosis.

Other Diseases.

The remaining 8 cases were as follows:—Varicella, 3; pertussis, 1; tonsillitis, 1; ophthalmia neonatorum, 1; faecal fistula, 1; pediculosis, 1.

Ambulance Work.

	Miles.
Admissions,	4,669
Dismissals,	2,329
Other runs,	1,752
Total Mileage,	<u>8,750</u>

Grounds and Buildings.

During the year economisers were installed for the purpose of lessening the amount of fuel consumed by the boilers. Pavilion VI was repainted in the spring by the outdoor staff.

Staff.

The indoor staff at the end of the year comprised 1 resident physician, 1 matron, 5 sisters, 1 staff nurse, and 20 probationer nurses. In addition, there were 14 maids and 1 cook.

The outdoor staff comprised 1 staff foreman, 2 assistant mechanics, 1 chauffeur-gardener, and 1 gardener.

The health of the staff throughout the year was satisfactory.